Graham Oppy

Describing Gods

An Investigation of Divine Attributes

DESCRIBING GODS

How do religious believers describe God, and what sort of attributes to they attribute to him? These are central topics in the philosophy of religion. In this book Graham Oppy undertakes a careful study of attributes which are commonly ascribed to God, including infinity, perfection, simplicity, eternity, necessity, fundamentality, omnipotence, omniscience, freedom, incorporeality, perfect goodness, perfect beauty and perfect truth. In a series of substantial chapters, he examines divine attributes one by one, and relates them to a larger taxonomy of those attributes. He also examines the difficulties involved in establishing the claim that understandings of divine attributes are inconsistent or incoherent. Intended as a companion to his 2006 book *Arguing about Gods*, his study engages with a range of the best contemporary work on divine attributes. It will appeal to readers in philosophy of religion.

GRAHAM OPPY is Professor of Philosophy at Monash University. His books on philosophy of religion include: *Ontological Arguments and Belief in God* (1996), *Philosophical Perspectives on Infinity* (2006), *Arguing about Gods* (2006), *Reading Philosophy of Religion* with Michael Scott (2010), *The History of Western Philosophy of Religion* co-edited with Nick Trakakis (2013), *The Best Argument against God* (2013) and *Reinventing Philosophy of Religion: An Opinionated Introduction* (2014).

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Preface

This book has been an inordinately long time in the making. I began working on it in the first half of 2004, and had some material completed by the end of June that year. Thereafter, I made very little progress with it until I began working on the 'Models of God' project with Nick Trakakis and Mark Manolopoulos, supported by ARC Discovery Project Grant DP1093541, in 2010. A year of study leave from Monash in 2013 allowed me to apply the finishing touches.

The overall aim of the present work is to investigate attributes that are often ascribed to God by those who believe in God. This investigation might, eventually, feed into verdicts about the coherence of various conceptions of God. But, as it stands, the work would only license the most preliminary and tentative verdicts.

There are many people and organisations to thank. I am grateful for the support that I have received from my colleagues at Monash, from within the School of Philosophical, Historical and International Studies, from within the Faculty of Arts more widely and from within the university community as a whole. I am also grateful to the many philosophers with whom I have discussed material that appears in this work. No doubt I won't remember everyone; the list certainly includes: Mike Almeida, Dirk Baltzly, John Bigelow, John Bishop, Monima Chadha, Mark Edwards, Peter Forrest, Richard Gale, Bruce Langtry, Brian Leftow, Morgan Luck, John Maher, Neil Manson, Yujin Nagasawa, Alex Pruss, Mark Saward, Robert Simpson, Nick Trakakis, Ed Wierenga and two anonymous readers for Cambridge University Press. I noted above that part of the writing of this book was supported by an ARC Discovery project grant; I am indebted to the Australian Research Council, and to the Australian taxpayers who provide its funding. The editorial team at Cambridge University Press provided sterling support: in particular, I am grateful for the assistance and hard work of Hilary Gaskin, Gillian Dadd and Kim Richardson; and I am also indebted to Karen Gillen for her work on the index, and

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Some of the material presented here is not new. In particular, sections 1.1, 2.2, 3.1, 4.1, 4.3, 4.4, 5.3, 6.2, 6.3 and 8.1 have been published previously. On the other hand, sections 1.2–1.4, 4.2, 5.1–5.2, 5.4–5.6, 6.1, 7.1–7.5, 8.2–8.4, 9.1–9.4, 10.1–10.6, 11.1–11.5 and 12.1–12.2 are all new.

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Section 5.3 is based on an article that first appeared on the Secular Web, under the title 'Some Emendations to Leftow on Time and Eternity'. This material is republished here with the permission of Internet Infidels Inc., which I gratefully acknowledge.

Section 6.2 is based on an article – 'Leftow on God and Necessity' – that is to appear in the *European Journal for Philosophy of Religion*, a publication of Akademos Press. This material is republished here with the permission of the Editor, which I gratefully acknowledge.

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CHAPTER 1

Preliminaries

Before we discuss the divine attributes – the properties that are typically attributed to God – we need to make some preliminary observations about God, and about the range of properties that are typically attributed to God. At the end of this chapter, I shall construct a taxonomy of divine attributes; along the way, I shall provide some thoughts about attitudes that one might take towards attributing properties to God.

I begin by distinguishing between concepts of God and conceptions of God. While I think that there is just one concept of God, I hold that there are many different conceptions of God. In discussing the divine attributes, I discuss attributes that belong to different conceptions of God without supposing that there is a single coherent conception of God under which all of the attributes that I examine could be attributed to God. Noting that what I am calling 'divine attributes' are jointly inconsistent impugns neither the concept of God nor particular conceptions of God, unless those particular conceptions of God accept all of the jointly inconsistent attributes.

1.1 The concept of God

There are many different views that have been held about the content of the idea or concept of God, and many different suggestions that have been made about how to define or analyse the name 'God'. In the first part of this chapter, I defend the suggestion that to be God is just to be the one and only god, where to be a god is to be a superhuman being or entity who has and exercises power over the natural world [in circumstances in which one is not, in turn, under the power of any higher ranking or more powerful category of beings]. While many will take this to be a rather radical suggestion, it seems to me that there are many good reasons for adopting this proposal, and that there are no telling reasons that

speak against it.[1] Among the other controversial claims that are defended in the first part of this chapter, I might mention in particular the claim that there can be no more than one God, the claim that 'God' is not a title-term and the claim that the use of the name 'God' by non-believers is not parasitic on the use of this name by believers. Thinking hard about the use of the name 'God' turns up all kinds of interesting consequences.

1.1.1 No more than one God

Belief in a multiplicity of gods appears to have been widespread in times gone by. The belief – that there are many superhuman beings who have and exercise power over the natural world and the fortunes of humanity – was more or less universally accepted in (early) Norse, Greek and Roman cultures, among many others. Moreover, in these cultures it was accepted that there was no further being which held and exercised power over the gods. Perhaps it was allowed that there was a chief among the gods; but this chief god was of the same kind as his fellows, at most excelling in some limited respects. Furthermore, it was widely held in these cultures that there are superhuman beings, who have and exercise power over the natural world and the fortunes of humanity, who are to be distinguished from the gods: there are, for example, *demons* (who have lesser rank than the gods, and over whom the gods do exercise power), and also *heroes* and *demigods* (human beings who have been raised to a condition of immortality by the gods).

In short, then: the gods were held to be superhuman beings who held and exercised power over the natural world and the fortunes of humanity, but who were not themselves in turn under the power of any higher ranking or more powerful category of beings. Moreover, while it was held to be perfectly proper to worship (at least some of) the gods, it is worth noting that (at least some) demons and heroes and demigods were also regarded as perfectly proper objects of worship. The characterising feature of the gods was not their unique suitability as proper objects of worship; rather, what singled them out was their unique standing in holding and

[1] A reader for the publisher objects: 'No significant Jewish, Christian or Muslim philosopher describes God using the term "superhuman".' It is important to note that, if the word 'superhuman' were omitted from the definition, and if humans turn out to be the most powerful beings, then it will be a consequence of the definition that human beings are gods. In this context – by stipulation, if you insist – 'superhuman' just means 'being higher ranking or more powerful than human beings and whatever natural aliens there may be'.

exercising power over humanity, the natural world and anything else that holds and exercises power over humanity and the natural world.[2]

As Hume suggests, belief in a single God seems to have been a more recent development. The belief – that there is just *one* superhuman being who has and exercises power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity – has very widely supplanted the belief that there are *many* superhuman beings who have and exercise power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity. Of course, that is not to say that belief in a single God has everywhere supplanted belief in a manifold of gods. In particular, for example, there are contemporary varieties of Hinduism in which there are many gods, and hence in which there is no (single) God.[3] (And, obviously, there are also those who reject the claim that there is so much as one superhuman being who has and exercises power over the natural world and the fortunes of humanity.) Nonetheless, it seems relatively uncontroversial to claim that belief in God has largely displaced belief in gods, for those who are disposed to believe that there is at least one superhuman being who has and exercises power over the natural world and the fortunes of humanity.

If the above account of God and the gods is correct, then it follows immediately that it cannot be that there are two Gods.[4] Of course, there

[2] I gloss over difficulties that henotheism appears to create for my account. That some gods have and exercise power over other gods is consistent with the claim that, as a class, gods have and exercise power over everything else. However, I want to resist the suggestion that the 'lesser' henotheistic gods are, strictly speaking, gods.

[3] There are also varieties of Hinduism that are widely held to be monotheistic. (Mahadevan (1960: 24) goes so far as to say that 'it is a truth that is recognised by all Hindus that obeisance offered to any of [the forms and names of the gods] reaches the one supreme God'. But this is surely an exaggeration.) In particular, given that Dvaita Vedanta claims that Vishnu is the singular, all-important and supreme deity, there is at least *prima facie* reason to count this view as a version of monotheism. However, as already noted *inter alia* in the main text, whether we should in the end allow that this really is monotheism turns upon whether or not Vishnu is 'supreme' in the relevant sense. If Vishnu is merely a leader among peers, then this is not monotheism; on the other hand, if Vishnu has power over all distinct supernatural beings – i.e. if all distinct supernatural beings are merely devas, avatars and the like – then it seems that we should say that, by the lights of those who believe in Dvaita Vedanta's Vishnu, Vishnu is God.

[4] Compare Leftow (1998: 94): 'We also use "God" like a general predicate. For we can and do ask whether there is more than one God: the concept of God allows this question a "yes" answer.' If I am right, then while we can sensibly ask whether there is more than one god, it is not true that we can sensibly ask whether there is more than one God. In my view, there is no justification for the claim that we can and do use 'God' as a general predicate in a way that contrasts with our use of proper names like 'Moses'; on the contrary, at least at the level of syntax or grammar, 'God' is used in just the same range of ways as names like 'Moses'.

is nothing in the above account alone that rules out there being just two gods. For all that the account says, there might be one good god and one evil god who jointly hold and exercise power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity. Moreover, there is also nothing in the above account alone that rules out there being just one God with a dual nature, one aspect of that nature being good and the other aspect of that nature being evil. While, as a matter of historical fact, it seems that Zoroastrianism and Manichaeanism were polytheisms, there is a monotheistic variant of those views – or, at any rate, there is a *prima facie* plausible case for the suggestion that those who endorse the coherence of the Christian doctrine of the Trinity should also be prepared to endorse an analogous claim about the coherence of the neo-Zoroastrian doctrine of the Duality.

Sobel (2004: 4–7) writes:

> 'God' (uppercase) does by a natural and compelling convention of language – explicable in terms of its etymology – purport to name what would be the one and only true god (lowercase) … My semantic proposal is that the name 'God' today expresses our concept of a unique god. It expresses our concept of what would be the one and only true god, even if this concept is not strictly speaking the sense or meaning of this name.

If what I have written above is right, then what Sobel says here is not *exactly* correct. I agree with Sobel that, by something like 'a natural and compelling convention of language', it is simply a confusion to think that there could be two Gods. But this is not because we think that God would be the one and only *true* god; rather, it is because we think that God would be the one and only god. (It is noteworthy that Sobel gives no account of how he understands the word 'god', nor any account of what it would be for something to be a 'true god'. Even if you suppose that 'gods' are to be contrasted with demons, heroes, demigods, devas, avatars and the like, Sobel's addition of the word 'true' in the current context remains both mysterious and unexplained.)

1.1.2 No more than one proper object of worship

In my official account of gods in the previous section, I made no mention of *worship*: gods are superhuman beings who hold and exercise power over the natural world and the fortunes of humanity, but who are not themselves in turn under the power of any higher ranking category of beings. However, on some accounts, this is an oversight on my part: gods are

superhuman beings who are *to be worshipped because* they hold and exercise power over the natural world and the fortunes of humanity (and are not themselves in turn under the power of any higher ranking category of beings).

While it seems right to say that many of the gods were taken to be proper objects of reverence, adoration, extreme gratitude and worship, and while it also seems right to say that all of the gods were taken to be proper objects of awe, wonder and (perhaps) abasement, it does not seem evidently right to say that all of the gods were taken to be proper objects of reverence, adoration, extreme gratitude and worship. Instead, it seems that some gods were principally to be feared: they were agents of misfortune. These were not beings to be worshipped, praised, revered and adored; nor were they agents to which one could sensibly feel gratitude.[5] If this is right, then it would seem to be a mistake to insist that it is a necessary condition for being a god that one is a proper object of worship, reverence, adoration, extreme gratitude and the like.

It may be useful to think about Zoroastrianism in connection with this point. According to Zoroastrian doctrine, there are two gods, one good, one bad. However, only one of these gods – the good god – is the proper object of worship, adoration, reverence, praise, gratitude and the like; the other god – the bad god – will be vanquished by the good god in the fullness of time. But, even though the bad god will be vanquished by the good god in the fullness of time, that is not to say that the two gods are of different categories; on the contrary, they are twins who are very evenly matched.

The account of Zoroastrianism that I gave in the previous paragraph seems to me to be perfectly in order as it stands: no need for quote marks around the various occurrences of the word 'god'. Of course, those who think that it is a necessary condition for being a god that one be a proper object of worship, adoration, reverence, praise, gratitude and the like will hardly be persuaded by this; no doubt, for them, the previous paragraph simply grates. But I am inclined to think that it is very much a minority reaction to have one's hackles raised by the use of the word 'god' in the preceding paragraph: the standard or orthodox reaction is that there is

[5] Matters here are complicated by the fact that some scholars take it to be a necessary condition for being a god that one is actually the subject of a cult and that one actually possesses human followers. So, for example, there is scholarly contention about whether Loki should be counted as one of the Norse gods, or whether he should rather be placed in a lesser category (e.g. demi-god or giant-god), on the grounds that there is no evidence of a cult, or of followers, of Loki.

nothing semantically inappropriate about the expression 'bad god', even when the word 'god' is given its full, standard interpretation.

If it is accepted that it is not a necessary condition for being a god that one is a proper object of worship, adoration, reverence, praise, gratitude and the like, it does not immediately follow that it is then also not a necessary condition for being God that one is a proper object of worship, adoration, reverence, praise, gratitude and the like. However, there is surely at least some *prima facie* plausibility to the thought that, if one could be *one among many* superhuman beings who have and exercise power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity, and yet not be oneself a proper object of worship, adoration, reverence, praise, gratitude and the like, then one could be the *sole* superhuman being who has and exercises power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over natural world and the fortunes of humanity, and yet not be oneself a proper object of worship, adoration, reverence, praise, gratitude and the like. Perhaps it might be said that one could only be *one among many* superhuman beings who have and exercise power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity, and yet not be oneself a proper object of worship, adoration, reverence, praise, gratitude and the like, if one is in a substantial *minority* of the many superhuman beings who are not proper objects of worship, adoration, reverence, praise, gratitude and the like. But, at the very least, it is not clear how this claim might be supported. And, of course, if we allow that it could be that all (or almost all) of the superhuman beings who have and exercise power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over the natural world and the fortunes of humanity are not the proper objects of worship, adoration, reverence, praise, gratitude and the like, then it seems a very small step to the claim that one could be the *sole* superhuman being who has and exercises power over the natural world, over the fortunes of humanity and over any other superhuman beings which exercise power over natural world and the fortunes of humanity, and yet not be oneself a proper object of worship, adoration, reverence, praise, gratitude and the like.

However things may stand with the claim that it must be the case that God is a proper object of worship, adoration, reverence, praise, gratitude and the like, there are also questions to be asked about the further

inclination to maintain that God is the *only* proper object of each of worship, adoration, reverence, praise, gratitude and the rest. Sobel (2004: 10) writes:

> God would be in an objectively normative manner a proper object for religious attitudes [of reverence, adoration, abasement, awe, wonder, extreme gratitude and, above and before all others not included in it, of worship] … God would be *the* one and only *proper* object of worship. (Italics in the original.)

I have already noted that when there were polytheists who believed in many gods, those polytheists typically believed that it was perfectly appropriate to worship, revere, adore and praise demons, heroes and demigods. Moreover, as I also noted previously, there is some reason to think that there are contemporary Hindus who believe that it is perfectly appropriate to worship, revere, adore and praise devas, avatars and the like.[6] But, if it was perfectly proper and appropriate for polytheists to worship, revere, adore and praise beings who were not gods, why should it be inappropriate for monotheists – merely in virtue of their monotheism – to worship, revere, adore and praise beings who are not God?[7]

Quite apart from the theoretical considerations adduced in the preceding paragraph, it is also worth noting that – on an ordinary understanding of worship, reverence, adoration and the like – there are many contemporary monotheists who suppose that it can be perfectly proper to worship, revere and adore beings other than God. In particular, there are many contemporary monotheists who suppose that it can be perfectly proper to worship, revere and adore angels, saints, martyrs and specially favoured humans (such as the Virgin Mary). Of course, one might think to say that, while these contemporary monotheists apparently do suppose that it is perfectly proper to worship, revere and adore beings other than God, they are simply mistaken in making this supposition. However, even if there is some good sense in which these people are making a mistake, it

[6] As observed in note 3, matters are complicated by the fact that at least some Hindus think that all manifestations of divinity are manifestations of God. However, even if it were true that most Hindus think that it is perfectly appropriate to worship devas, avatars and the like only because these beings are, in some sense, identical with God, it would nonetheless also be true that there are contemporary Hindus who think that it is perfectly appropriate to worship devas, avatars and the like, even though these beings are not identical to God, and, moreover, even though these beings are not gods.

[7] Of course, the qualification here is not idle. If you are a monotheist who believes that God has said that you shall worship, revere, adore and praise nothing else, then, of course, you will think that there are no other proper objects of worship, reverence, adoration, gratitude and the like. But, in that case, it is not just your monotheism that is driving your response.

is rather hard to believe that the mistake in question is a merely conceptual mistake about what it takes for something to be worthy of worship, reverence, adoration and the rest.[8]

1.1.3 A question of occupation?

Leftow (1998: 94) suggests that 'the concept of God is a concept of an individual holding a special office', and then goes on to examine various suggestions about the nature of this 'special office': perhaps to be God is to have providence over all; perhaps to be God is to deserve worship; perhaps to be God is to be the most basic reality; perhaps to be God is to be the ultimate source of everything else; and so forth. To justify the claim that the concept of God is a concept of an individual holding a special office, Leftow says:

> The ambiguity between name and predicate suggests that 'God' is a title-term, like 'Pastor' or 'Bishop'. Many people can be bishops; in this way title-terms are like general predicates. But one can also address the office-holder by the title ('Dear Bishop …'); one can use the title as a name for the person who holds the office. Thus, the concept of God is a concept of an individual holding a special office.

The analogy between 'Bishop' and 'God' seems to me to be very weak and imperfect. While one might think that it is grammatically in order to say 'I spoke to God last night,' and yet not grammatically in order to say 'I spoke to the God last night,' one will also think that it is grammatically in order to say 'I spoke to the Bishop last night' and yet not grammatically in order to say 'I spoke to Bishop last night' (assuming, of course, that in this last case one is not meaning to refer to someone whose surname is 'Bishop'). Furthermore, it will also be grammatically in order to say 'I spoke to Bishop Gregory last night'; but there is no corresponding use for the word 'God', i.e. no grammatically acceptable sentence of the form 'I

[8] As Leftow (1998: 94) notes, *inter alia*, one could stipulate that an act is not an act of worship – or is not truly an act of worship – unless the object of the act is God. However, if we are supposing that to be God is to be a being that is properly an object of worship because of its unique role in holding and exercising power over the natural world and the fortunes of human beings, then it seems that the circle of ideas is a little too small: surely, if we are to take this position on our understanding of God, then we need a more independent understanding of what it is to be an act of worship. And, in any case, it is surely quite implausible to suppose that it is built into the concept of worship that one can only worship God. Surely our polytheistic forebears did worship their gods; and, given their view about the nature of things, surely it was no less appropriate for them to do so than it is for contemporary monotheists, given their views about the nature of things, to worship God.

spoke to God Gregory last night.' On the evidence of these kinds of cases, it seems to me to be quite clear that 'God' is not a title-term.[9]

Even if it is agreed that 'God' is not a title-term, it remains open that there might be a close connection between the name 'God' and a given definite description. In particular, it might be suggested that there is a definite description that is the canonical reference-fixer for the proper name 'God'. Moreover, if this view is taken, then one might well construe the argument of sections 1.1.1 and 1.1.2 of this chapter as the initial stages of an argument for the conclusion that the canonical reference-fixer for the proper name 'God' is the definite description 'the one and only god' (or, perhaps, 'the god'). On this proposal, if it is not actually true that there is one and only one God, then the name 'God' is actually empty. However, if it had been true that there is one and only one god, then it would have been the case that the name 'God' was a name for that unique god. (Put another way: in a possible world in which there is one and only one god, if *our* name 'God' is in currency in that world, then it is used in that world as a name for the unique god that exists in that world.)

If it is agreed that we have fastened on to the right conceptual framework for thinking about the concept of God, it remains open that the details of the account that I have suggested could be disputed. In particular, it might be maintained that, even though Leftow is wrong in his insistence that 'God' is a title-term, Leftow is nonetheless correct in thinking that the canonical reference-fixer for the name 'God' has a richer content than the simple description 'the one and only god'. Perhaps it might be suggested that the canonical reference-fixer for the name 'God' is the description 'the one and only being with providence over all', or the description 'the one and only being who properly deserves worship', or the description 'the one and only being who is ultimately real', or the description 'the one and only being who is the source or ground of everything else', or some other description of this ilk.

The examples that Leftow provides can be dealt with summarily. I have already given my reasons for thinking that the description 'the one and only being that properly deserves worship' is not the canonical reference-

[9] Sobel (2004: 8) writes: 'I regard as hardly controversial, and as not calling for argument, that "God" in religious discourse and literature is a proper name, not a title-term.' Since Sobel's view is plainly controversial – and, indeed, controverted by philosophers such as Leftow – it does call for justification of the kind that I have here supplied. Perhaps it is also worth noting here that Sobel is right to go on to note that 'The One God', 'The True God' and 'The Lord' might well be taken to be title-terms, on a par with 'The Bishop'. These further expressions are plausibly claimed to be 'title-terms'; at any rate, they are evidently not *standard* definite descriptions such as 'the one god' and 'the bishop'.

fixer for our name 'God'. The description 'the one and only being with providence over all' fails to fit the bill, I think, because it does not seem incoherent to suggest that it might be the case that God fails to provide for the inhabitants of creation.[10] The description 'the one and only being that is ultimately real' fails to fit the bill because it is unclear what is meant by the words 'ultimately real': many of us think that we understand well enough what is meant by the proper name 'God' even though we can make no sense of the suggestion that reality comes in degrees. Finally, the description 'the one and only being who is the source or ground of everything else' fails to fit the bill, I think, because it does not seem incoherent to suggest that it might be the case that God fashioned the universe from pre-existing materials.[11]

There are other suggestions that also can be dealt with summarily. For instance, Senor (2008) suggests that we might take the canonical reference-fixing description to be 'the personal creator who revealed himself to the Hebrew people'.[12] Here, there are at least two kinds of difficulties.

On the one hand, I think that it is plainly not part of the concept of God that God is personal. Even within quite mainstream Christian theology, there are those who resist a highly anthropomorphic conception of God, preferring to call God a 'principle', or 'ground', or the like.[13] And, while it seems reasonable to suppose that very early conceptions of gods were highly anthropomorphic, it is not even clear that later polytheistic conceptions of the gods were similarly anthropomorphic in nature. At the very least, it certainly seems that one can imagine a variant of Zoroastrianism in which the two gods are impersonal principles that govern the operations of the universe. All things considered, it seems rather implausible to suppose that it is part of the very concept of monotheism that God is personal in nature.

[10] Leftow (1998: 94) notes that both Aristotle and Plotinus accepted that God exists, but denied that God is providential, 'without obviously contradicting themselves'.

[11] Following the lead suggested by Leftow in note 10 above, we might observe that, while Plato accepted that God exists, the evidence of the *Timaeus* suggests that Plato also accepted that God fashioned the world from independently pre-existing materials 'without obviously contradicting himself'.

[12] Senor (2008: 172f.) actually writes: 'The intensional content of the theistic conception of God is something like "the personal creator who revealed himself to the Hebrew people", with the extension being fixed in a Kripkean, causal manner.' At the very least, this is quite close to the proposal that I have attributed to him in the main text.

[13] Of course, there are also the various kinds of 'negative' theology to be considered at this point. At the very least, it is clear that there are many in the Christian tradition who have wanted to resist the suggestion that God is *literally* a person. If we are asking for a literal reference-fixer for the name 'God', then it is plainly controversial to include the word 'personal' in that reference-fixer.

On the other hand, it seems even less plausible to suppose that it is part of the very concept of monotheism that God revealed himself/herself/itself to the Hebrew people. We have already noted that there are monotheistic traditions that appear to have grown up independently of the Hebraic tradition. Suppose, for example, that it is the case that, while God did not reveal himself/herself/itself to the Hebrew people, the sacred texts of Dvaita Vedanta are the direct result of divine inspiration by the one and only god. In that case, it seems to me that we should nonetheless be prepared to accept that God exists, even though there is nothing that satisfies the reference-fixing description that Senor (2008) defends. (Of course, even if it is not actually the case that there are monotheistic traditions that have grown up independently of the Hebraic tradition, it is still conceivable that there should have been such traditions, and it is also still conceivable that those traditions should have been the only traditions rooted in genuine divine inspiration. If we judge – as I think we should – that, in that case, it would still be that God exists, then that remains enough to defeat the proposal that 'the personal creator who revealed himself to the Hebrew people' is the canonical reference-fixer for the name 'God'.)

Of course, even if it is agreed that the various proposals that Leftow canvasses are inferior to the proposal that 'the one and only god' is the canonical reference-fixer for the name 'God', it is nonetheless clear that there might be some hitherto unexamined candidate for that canonical reference-fixing description that is superior to the proposal that 'the one and only god' is the canonical reference-fixer for the name 'God'. In particular, I guess, many philosophers will be inclined to think that something like Swinburne's account of the canonical reference-fixer for the name 'God' comes pretty close to the mark. However, before I go on to examine Swinburne's proposal, and others of its ilk, it will pay us to think a bit more about what is properly involved in giving an account of a concept (and, in particular, in giving an account of an individual concept).

1.1.4 *Concepts and conceptions*

Typically, when we are asked for a reference-fixing description for a name, we are satisfied if we can find a description that actually picks out the entity that bears the name. In particular, in the case of many standard proper names, we are satisfied that someone knows who it is that bears the name, provided only that the person in question can give

a non-trivial[14] description that actually picks out the bearer of the name. There is at least a loose, intuitive sense in which we will be prepared to say that someone associates an appropriate individual concept with a name, provided that the individual concept that the person associates with the name does actually and non-trivially pick out the bearer of the name.

While this account seems straightforwardly correct for cases in which a name has a unique bearer – i.e. for cases in which there is a unique object that pretty much all competent users of the name pick out with their reference-fixing descriptions – it is less clear what to say about cases in which there is no object that answers to the reference-fixing descriptions that are provided by competent users of the name, or in which it is controversial whether there is an object that answers to the reference-fixing descriptions that are provided by competent users of the name. (It is also less clear what to say about cases in which there are different objects that answer to different reference-fixing descriptions that are provided by competent users of the name, or in which it is controversial whether there is a *unique* object that answers to the reference-fixing descriptions that are provided by competent users of the name. Perhaps we can handle these kinds of cases by adverting to differences in idiolect, or the like; in any case, this is not the kind of example that will be of primary interest to us in the forthcoming discussion.)

Fictional names – i.e. names that are introduced in the course of novels, films, television dramas, songs and the like – are sometimes held to be difficult cases. However, at least in broad outline, it seems to me to be plausible to suppose that some kind of pretence account of fictional names will prove to be correct. One is a competent user of the name 'Sherlock Holmes' – one counts as knowing who is Sherlock Holmes – provided that one can provide an appropriate reference-fixing description while playing along with the pretence that is prescribed by the novels and short stories of Arthur Conan Doyle.[15] Among the questions left open by this very brief sketch, there is the important question of what to say about those

[14] It is no straightforward matter to say what non-triviality amounts to here. That we need some restriction of this kind seems plain enough: at least in a wide range of contexts, someone who can only supply the description 'the bearer of the name "N"' will not count as knowing who N is.

[15] This account is only roughly correct. There are other texts – movies, radio plays, etc. – which prescribe rather different pretences for the name 'Sherlock Holmes' (as in, e.g. the movie *The Seven Per Cent Solution*). While the use of the name 'Sherlock Holmes' in these other texts derives from the use of the name 'Sherlock Holmes' in the writings of Arthur Conan Doyle, it seems to me that – at least in some contexts – these other texts would quite properly license a different range of reference-fixing descriptions. What can be properly pretended in connection with the use of the name 'Sherlock Holmes' depends upon the texts and other props that are taken to underwrite the pretence in question.

who offer what would have been an appropriate reference-fixing description had they been playing along with a prescribed pretence, but who are not in fact playing along with any kind of pretence. In the case of young children who *really* do believe that Santa Claus brings them presents on Christmas Eve, there is a question to be addressed about their competence in the use of the name 'Santa Claus'.[16] While there may be an element of stipulation in this verdict, I am inclined to say that one can only be fully competent in the use of a fictional name if one knows that the name is indeed fictional.

Even if it is accepted that the preceding paragraphs are at least in the right ballpark when it comes to ordinary non-empty proper names and fictional names, we are still left with a host of very difficult cases. In particular – and here we approach more closely the case that is our primary object of interest – there are cases in which there is a group of users of a name who suppose that the name really is borne by a particular individual even though there are many other users of the name who deny – or, at any rate, strongly doubt – that the particular individual in question exists.

Consider, for example, 'Atlantis'. Some people think that there really was an island, host to an ancient civilisation, that was lost beneath the waves. Other people think that there was no such island and no such ancient civilisation; rather, what we have are mere stories, or myths, of very ancient provenance. Moreover, among those who suppose that there really was an island, host to an ancient civilisation, that was lost beneath the waves, there is considerable difference in opinion about the approximate location of that submerged island. Thus, if we ask a range of (presumptively) competent speakers to provide reference-fixing descriptions for the name 'Atlantis', we will get a range of answers of the form 'an island, host to an ancient civilisation, submerged in the such-and-such sea [the so-and-so ocean]', where, in some cases, the answers are intended to be taken at face value, and yet, in other cases, the answers are intended to be understood to involve a playing along with a mistaken theory, or a myth, or a fiction or the like. (Perhaps this account of the range of reference-fixing descriptions that one can or would elicit for 'Atlantis' is not correct. No matter. For present purposes, it will suffice to pretend that it is

[16] 'Santa Claus' seems to me to be a particularly tricky case, because it is typically unclear how far young children are complicit in the maintenance of the 'Santa Claus' fiction. Of course, if we say that young children who *really* do believe that Santa Claus brings them presents on Christmas Eve are not competent in the use of the name 'Santa Claus', we shall also want to say that this lack of competence on their part is primarily due to the behaviour of significant adults who confirm them in this incompetence.

true. Even if 'Atlantis' doesn't behave in exactly this way, it seems plausible enough to suppose that there are other names that do (or would) exhibit this kind of pattern of elicited reference-fixing descriptions.)

If the name 'Atlantis' works in the way suggested, then it seems to me that it would be quite natural to say that there is a concept that is properly associated with the name, namely the concept of being an island, host to an ancient civilisation, that has been lost beneath the waves. (Perhaps it should also be added that the relevant waves are somewhere in the vicinity of one of the ancient sites of Indo-European civilisation.) Everyone who is competent in the use of the name 'Atlantis' will agree on this much, even if they disagree about whether the concept answers to anything in reality, and even if they disagree about the more precise location of the island (if there is such an island). Of course, we could go on to say, if we wanted, that different speakers have different conceptions that they associate with the name 'Atlantis' – different further specifications that might be brought out in reference-fixing descriptions – but there is nothing in this further suggestion that defeats the claim that there is a single concept that all competent speakers associate with the name. Moreover, we can also go on to note that, in many conversational contexts, a process of conversational accommodation might well bring it about that participants all behave as if some particular conception of 'Atlantis' is actually the concept of 'Atlantis' that is properly shared by all speakers of the language.

No one who has read the chapter through to this point will be surprised to learn that the proposal that I wish to make about the word 'God' is that it behaves in the same kind of way as I have supposed that the name 'Atlantis' functions. On the one hand, there is a wide diversity in the reference-fixing descriptions that people associate with the name 'God'; on the other hand, the description 'the one and only god' is the canonical reference-fixer for the name 'God', and it gives expression to the concept that is properly associated with the name. Of course, for many competent speakers, there is an element of pretence involved in the production of this reference-fixing description: in using the word 'God', these people understand themselves to be playing along with a mistaken theory, or a mere story or the like. However, even these people agree that God would be the one and only god, were there such a being.

1.1.5 God's essential attributes

At least sometimes, some theorists suggest that, when we ask for a reference-fixing – 'identifying' – description for a name, we should be

satisfied only if we can provide a description that actually picks out the entity that bears the name by picking out (some of) the essential properties that are possessed by the bearer of the name, i.e. by picking out non-trivial properties of the bearer of the name that the bearer of the name possesses in all possible worlds in which the bearer of the name exists. Of course, because of the availability of rigidifying devices, there is a way in which the meeting of this demand can be trivialised: if one has a description that actually picks out the bearer of the name, then, by rigidifying on that description, one can obtain a description that picks out the actual bearer of the name in all possible worlds in which that entity exists (and which picks out nothing in those worlds in which the actual bearer of the name fails to exist). However, having noted this complication, one could give the additional requirement teeth by insisting that the essential properties that are invoked in the reference-fixing description should not be 'world-bound' properties that are constructed by rigidification on non-essential properties that are possessed in the actual world.

Consider, for example, the account of the concept of God given by Swinburne (1979: 8). According to Swinburne, the following is a logically necessary truth: God exists iff there exists a person without a body (i.e. a spirit) who is eternal, is perfectly free, omnipotent, omniscient, perfectly good and the creator of all things. Thus, on Swinburne's account, God is *essentially* a person without a body (i.e. a spirit) who is eternal, is perfectly free, omnipotent, omniscient, perfectly good and the creator of all (other) things. While Swinburne (1979: 128) goes on to deny that God is necessarily existent, other philosophers – e.g. Plantinga (1974) – have gone so far as to say, at least *inter alia*, that the following is a logically necessary truth: God exists iff there necessarily exists a person without a body (i.e. a spirit) who is necessarily eternal, is necessarily perfectly free, necessarily omnipotent, necessarily omniscient, necessarily perfectly good and necessarily the creator of all (other) things.[17]

Making use of the terminology introduced in section 1.1.4 of this chapter, it seems to me that we should say that what we are offered by Swinburne, Plantinga and others who make pronouncements in a similar vein are accounts of particular *conceptions* of God that would plainly be quite unacceptable if offered as accounts of the *concept* of God. As I noted earlier, there is genuine – informed, intelligent, reflective – disagreement,

[17] Note that, in holding that God is necessarily the creator of all (other) things, one need not be committed to the claim that, necessarily, there are some things that God creates. The claim is only that, necessarily, the existence of anything other than God is ultimately explained by God's creative act.

both amongst regular believers and theologians, about whether it is appropriate to hold that God is a person, rather than an impersonal principle. Furthermore – as the case of Swinburne and Plantinga illustrates – there is genuine disagreement about whether God is necessarily existent, i.e. about whether there are logically possible worlds in which God fails to exist. Given that there can be serious dispute between thoughtful believers about whether or not God is personal, and about whether or not God exists necessarily, it seems that we have the best of reasons for denying that it is part of the *concept* of God that God is a person and that God exists necessarily. (It would, I think, be passing strange to say, for example, that Swinburne fails so much as to possess the concept of God because he says that God does not exist of necessity. Yet, if it is part of the concept of God that God exists of necessity, then how can it be that Swinburne possesses the concept, and yet fails to acknowledge that God exists of necessity?)

The kind of difficulties to which I am alluding here are ubiquitous. For instance, Hoffman and Rosenkrantz (2002a: 13) say that, according to the regulating notion of traditional Western theism, God is the greatest possible being. But, even if it were true that there is a regulating Western *conception* of God according to which God is the greatest possible being, I do not think that it would follow that there is a regulating Western *concept* of God according to which God is the greatest possible being. And, in any case, I do not think that it is even true that there is a regulating Western *conception* of God according to which God is the greatest possible being. True enough, there has, at some times and in some places, been widespread acceptance of the claim that God is the greatest possible being. But, even in those times and at those places, this acceptance has sat alongside recognition of the fact that, at other times and in other places, reasonable and well-informed people have disagreed with this judgement. (Some reasonable and well-informed people have thought of God as the source and explanation of everything else, without supposing that the source and explanation of everything else has to be such that it is logically impossible for there to be anything greater than it. Some reasonable and well-informed people have thought of God as the ruler or commander of everything else, without supposing that the ruler or commander of everything else has to be such that it is logically impossible for there to be anything greater than it. And so forth.)[18] But, if one is able to acknowledge

[18] Sobel (2004: 17) writes: 'My position … is that none of these attributes [omniscience, everlastingness and the rest] is a part of the shared ordinary concept of God in the modern community of global discourse in English, although these ideas – since widely possessed by members of this linguistic community – are at least candidates for inclusion. My semantic hypothesis is that the ordinary

that there can be reasonable and informed disagreement about whether God is the greatest possible being, then one can hardly think that it is a conceptual truth – part of the very concept of God – that God is the greatest possible being.

I expect that many philosophers will want to resist the line that I have been taking here. In particular, I expect that many philosophers will want to say that concepts are something like functions on logically, or metaphysically, or (perhaps) epistemically, possible worlds: yet, if concepts are something like functions on logically, or metaphysically, or (perhaps) epistemically possible worlds, then concepts cannot possibly behave in the way that I have suggested the concepts of God and Atlantis behave. Perhaps unsurprisingly, I want to directly disagree with any such philosophers. In my view, if we think of concepts as something like functions over 'worlds', then we should take the 'worlds' in question to be something much more like *points of view that could be adopted*. Of course, this bare proposal leaves many important questions unanswered. In particular, one might wonder about the constraints that should be imposed on the adoption of points of view: must the adoption be rational or reasonable? must it be well-informed? must it be the product of proper reflection? etc. While I am inclined to think that, at most, there should only be quite weak constraints imposed on the adoption of points of view, I am happy to allow that this is clearly a topic for future careful investigation.[19]

1.1.6 And if we say there are no gods

Sobel (2004: 9) writes:

> The status of 'God' as a name is settled by the intention of believers when using it to refer by tying into a referential chain that goes back to a named being, whether or not they succeed in their intention. The use of this name by unbelievers is parasitic on its use by believers.

I think that it is clearly a matter for contention whether, when believers use the name 'God', they do intend to refer 'by tying into a referential

concept of God that is expressed by "God" is confined to the idea of a being worthy of worship.' As I argued in section 1.1.2 above, even Sobel's position – while more modest than any other that I have come across – is overstated.

[19] At this point, it is worth recalling the earlier observation about speaker accommodation. Often, when like-minded speakers are gathered together, they will talk *as if* some particular conception associated with a given term is actually the concept associated with that term. However, if we are thinking about the concept that is associated with a term across the broad body of all speakers who are competent in a language, then we will get things wrong if we mistake a particular conception shared by a sub-group of like-minded speakers for the concept in question.

chain that goes back to a named being'. Even if we suppose that [it is widely accepted that],[20] across a wide range of cases, names are tied by referential chains to initial baptismal ceremonies in which a presented being is baptised with a name, it does not seem plausible to suppose that most believers think that that is how it is with the name 'God'. No doubt, there are *some* believers who think that this is how it was: God appeared to some people and (in effect) baptised himself by saying to them 'I am the Lord your God,' etc. However, I suspect that there are also many believers who think that, when they use the name 'God', they are simply intending to refer to the one and only god, and who would go on to reject the claim that it ever actually happened that God appeared to some people and (in effect) baptised himself by saying to them 'I am the Lord your God', etc. (There is a wide range of views on such questions as whether God can be perceived; whether God can be conceived; whether God can be 'named'; whether God could be the object of an act of ostension; and so forth. A full discussion of the issues raised in this paragraph might delve into all of these further questions; but that is not a task for the present chapter.)

If I am right in suggesting that the status of 'God' as a name is not settled in the way in which Sobel says, then it seems to me that there is also room to doubt that it is right to say that the use of the name 'God' by unbelievers is parasitic on the use of this name by believers. In particular, if the name 'God' is understood by everyone to apply to the one and only god, on the assumption that there is just one god, then it seems to me that there is no sense in which the use of the name by unbelievers is parasitic on the use of the name by believers. Even if it were universally agreed that there are no gods – and even if it had *always* been universally agreed that there are no gods – we would have no trouble understanding the claim that God does not exist. Compare this case with, for example, our treatment of the names 'Atlantis' and 'Santa Claus'. I do not think that we want to say that the use of *these* names by those who think that these names are empty is 'parasitic' on the use of these names by those who think that these names are borne by actually existing entities.

Drawing on his suggestion that God would be the proper object of worship, Sobel (2004: 24) suggests that it would be possible for one to hold that, even if there is a perfect being – i.e. a being that possesses some traditional list of theologically approved perfections – there is no god. On

[20] In order to gloss over some difficulties that are not relevant to my present concerns, let us pretend that, even if most people don't explicitly accept the claim that the reference of names is fixed by referential chains anchored in initial acts of baptism, nonetheless, most people are implicitly committed to the correctness of this claim.

the contrary, I take it that if there is a perfect being, then there is a god. So, adopting my view that God would be the one and only god, if it then turns out that, nonetheless, there is no God, that can only be because there is more than one god. If there is just one perfect being, who holds and exercises power over the natural world and the fortunes of humanity, but who is not in turn under the power of any higher ranking or more powerful category of beings, then that perfect being is God.[21]

1.2 Conceptions of God

If the preceding account of the concept of God is correct, then there is a unique concept of God, but there are multifarious conceptions of God. Perhaps, if the preceding account is incorrect, then we should rather say that there are multifarious concepts of God. In any case, it is pretty evidently true that there are many different ways in which people have conceived of monotheistic gods.

Some philosophers and theologians have supposed that the monotheistic god in which they believe admits of a very precise and explicit characterisation. So, for example, as we have already noted, Swinburne (1979: 8) claims that the proposition 'God exists' is logically equivalent to the proposition 'there exists a person without a body – i.e. a spirit – who is eternal, perfectly free, omnipotent, omniscient, perfectly good and the creator of all things'. On this type of approach, theorists suppose that it is possible to give a particular list of attributes that are uniquely characteristic – or, at any rate, are jointly uniquely characteristic – of the monotheistic god in which they believe. Of course, there can be – and is – disagreement between monotheists about the properties that appear on any such list; and there will certainly be disagreement about how the properties that appear on the list should be understood (if, at any rate, the list includes properties such as eternity, perfect freedom, omnipotence, omniscience, perfect goodness and the like).

Some philosophers and theologians have supposed that there is a single property or attribute that can be used in the identification of a monotheistic god, and that any other properties or attributes of god can be inferred

[21] In Oppy (2006a: 259) I begin my discussion of arguments from evil by pointing out that, since I think that there are no supernatural beings of any kind, I don't attach very much importance to arguments from evil. The present chapter helps to make clear the connections that I see between what I take to be the concept of god, the concept of God and the various different conceptions (or theories) of God that have wide currency. I take it that what I say here is consistent with the views expressed in that earlier work.

from the one. So, for example, following Augustine, there is a long tradition of supposing that there is a monotheistic god who is that than which no greater can be conceived, or the greatest possible being, or an absolutely perfect being or the like. Often philosophers and theologians who have adopted this kind of conception of a monotheistic god have expended much effort in trying to infer the further properties of their god from the single property mentioned.

Some philosophers and theologians have been hostile to the thought that it is possible to arrive at any 'intrinsic' characterisation of the god in which they believe. So, for example, Anselm tells us that his god is a being greater than can be conceived, by which I take it that he means that his god is a being of which he is unable to form any adequate 'intrinsic' conception. Of course, this explanation of Anselm's account is only useful if we have an account of what it is for a characterisation of an entity to be 'intrinsic'. It is not clear that there is any such account to be had. True enough, we might say that all characterisations are either 'extrinsic' or 'intrinsic', and we might add that to characterise an entity in terms of its relations to other entities, or in terms of what it is not, is only to give an 'extrinsic' characterisation. But it seems highly plausible to claim that this is not enough: we need more than instances of characterisations that should be classified as 'extrinsic' before we can be confident that there is a secure and intelligible distinction between 'intrinsic' and 'extrinsic' classifications. (Is goodness intrinsic? If so, are we to deny that our god is good if we adopt this kind of approach? Is freedom intrinsic? If so, are we to deny that our god is free if we adopt this kind of approach? Is personality intrinsic? If so, are we to deny that our god is a person if we adopt this kind of approach? And so forth.) Moreover, there are well-known reasons for being sceptical that it is possible to provide a single, context-independent division between positive and negative properties: but if we cannot distinguish between positive and negative properties, then we cannot make sense of the claim that a monotheistic god – or, indeed, any other entity – may be characterised 'in terms of what it is not'.

However it is that we suppose that philosophers and theologians conceive of their monotheistic god, there is a difficulty in getting that conception of god to match up in the right kind of way with the kinds of conclusions that are typically delivered by arguments for the existence of a monotheistic god. On any of the conceptions of god that we have mentioned so far, it may be plausible to support that the god in question will turn out to be the sole creator – and perhaps also sustainer – of the physical universe that we inhabit. Hence, it might be supposed, a good

argument for the existence of a creator – or sustainer – of the physical universe that we inhabit will be, *ipso facto*, a good argument for the existence of the monotheistic god in question. Not so. For all that has been said so far, there may be many different kinds of conceivable beings that could be the creators – and/or sustainers – of the physical universe that we inhabit. If we were to suppose, for example, that a monotheistic god can be identified as anything that is the sole creator – and/or sustainer – of the physical universe that we inhabit, then it seems that we would not have ruled out the possibility of a perfectly evil or morally indifferent monotheistic god.

In part, there is a terminological difficulty here. One might suppose – as perhaps many philosophers and theologians have supposed – that it is constitutive of the notion of a monotheistic god that that being is worthy of worship, the proper focus of religious awe and so forth. In that case, it is plausible to claim that there cannot be a monotheistic god that is evil or morally indifferent. (Perhaps it is also true that there cannot be a monotheistic god at all; for perhaps it is the case that there could not be anything that is worthy of worship. But let's not go down that sceptical track here.) However, this terminological constraint, even if it is accepted, cannot alone rule out the possibility that the sole creator – and/or sustainer – of the physical universe is evil, or morally indifferent, or itself a finite and contingently existing entity or the like. When we come to argue about the existence of monotheistic gods, we should not suppose that our conception of god somehow, of itself, rules out various competing supernatural hypotheses that non-theists might plausibly claim are no less deserving of discussion and consideration than are more familiar theistic hypotheses.

Of course, many philosophers and theologians who are prepared to accept that there is a monotheistic god that conforms to any of the above characterisations will suppose that there are many other properties that also turn out to correctly characterise that god. While there have been some – e.g. deists – who have been happy to allow that we can know nothing more than that there is a given kind of monotheistic god – e.g. a perfect creator of the physical universe – there are many who suppose that their god is the key to immortality, or the provider of largesse in response to petitionary prayer, or the agent of deeds that are recorded in such and such holy books, or the worker of such and such miraculous occurrences, and so on and so forth. This fact introduces further complexity into the discussion about arguments for the existence of monotheistic deities. On the one hand, there are those who suppose that the familiar arguments should be taken to be aiming to establish the existence of a being that conforms to the 'thin' characterisations that we mentioned

at the beginning – and who hence suppose that one must then appeal to further arguments in order to establish that the being that conforms to a given 'thin' characterisation also possesses the further attributes that they suppose their monotheistic god to have. On the other hand, there are those who suppose that the familiar arguments should be taken to be aiming to establish the existence of a being that possesses all of the attributes that they take their monotheistic god to have. While one might suppose that the former approach can be justified by appeal to the observation that non-theists are typically anti-supernaturalists across the board, it is not obvious that this is satisfactory: it might be, for example, that arguments from experience are better suited to deliver the conclusion that a 'thick' characterisation of a monotheistic god is instantiated than they are to delivering the conclusion that a 'thin' characterisation of a monotheistic god is instantiated.

1.3 Divine attributes

Given the diversity of conceptions of monotheistic gods, it is hardly surprising that there is a similar diversity in conceptions of the attributes or properties of monotheistic gods.

There is some fairly widespread agreement about some of the relational properties of monotheistic gods. Thus, for example, there is very widespread agreement that a monotheistic god is the unique cause of the existence of the physical universe – though, of course, there is widespread disagreement about the *sense* in which there is a unique cause of the existence of the physical universe. Similarly, there is fairly widespread agreement that a monotheistic god can properly be said to love the finite human beings who populate the physical universe and that, in particular, the existence of a monotheistic god guarantees some kind of afterlife for human beings – or, at any rate, for some human beings – when the physical existence of those human beings comes to an end.

There is much less widespread agreement about the non-relational – 'intrinsic', 'internal' – attributes or properties of monotheistic gods.

Some philosophers and theologians seem to have gone so far as to deny that a monotheistic god has any non-relational attributes or properties. I take it that it is simply unintelligible to suppose that there is something that lacks any non-relational attributes or properties, regardless of the view that we take about the metaphysics of attributes and properties. If on the one hand, we suppose that attributes and properties are the metaphysical correlates of predicates – i.e. if we adopt a 'thin' conception of attributes

and properties as the metaphysical shadows of a syntactic or semantic category – then it is clear that even a monotheistic god must have various non-relational properties, such as being existent, being self-identical, being the one and only monotheistic god and so forth. If, on the other hand, we suppose that attributes and properties are universals – i.e. if we adopt a 'thick' conception of attributes and properties as ontological or metaphysical primitives – then it is still the case that we cannot avoid the conclusion that there is something that a monotheistic god is like in itself, i.e. there is an intrinsic, non-relational way that the monotheistic god is. But this is just another way of saying that a monotheistic god possesses some non-relational properties and attributes. Of course, it might be that in saying that a monotheistic god possesses no non-relational properties or attributes, one might be trying to give expression to the thought that it is impossible for human beings to arrive at any 'positive' conception – however remote – of the non-relational properties or attributes that are possessed by a monotheistic god. But, even if we can make sense of the idea that there are beings of which it is true that we can form no 'positive' conception – however remote – of the non-relational properties of those beings, it would not follow that we are entitled to the claim that a monotheistic god possesses no non-relational properties or attributes; rather, the most that we could be entitled to claim is that the monotheistic god possesses no non-relational properties or attributes of which we can form any 'positive' conception, even though, of course, any such being does possess some non-relational properties and attributes.

Some philosophers and theologians seem to have gone so far as to suppose that we can give no non-contradictory characterisation of the properties and attributes possessed by a monotheistic god, and yet that some purpose is served by the production of explicitly self-contradictory characterisations of such a being. Thus, for example, one can find countless examples in which a monotheistic god is characterised as a 'being beyond being', 'a being that transcends being', 'a being that is beyond being and non-being' and so on. My way with this is short. If a theory lapses into contradiction, then it fails in the most spectacular way that it is possible for a theory to fail. Since it is simply contradictory to say that a monotheistic god is a being that is beyond being and non-being, any theory that includes this claim should immediately be rejected on grounds of falsity: no theory that is committed to this kind of claim can be true. In order to give content to the claim that there is a monotheistic god, we need to have a consistent account of the individuating properties and attributes of the being in question. While we may coherently suppose that

we can only give an intelligible account of the relational properties and attributes of the being that we are picking out – e.g. that it is the cause of the existence of the physical universe – we cannot coherently suppose that any useful theoretical purpose is served by offering an explicitly contradictory characterisation of the non-relational properties and attributes of this being. Rather than waffle, we should simply say that we can form no 'positive' characterisation of the non-relational properties and attributes of the being in question, and leave it at that.

Some philosophers and theologians seem to suppose that, while we can give no literal characterisation of the non-relational properties and attributes of a monotheistic god, we can nonetheless make some kind of 'positive' characterisation of those properties and attributes in 'analogical' or otherwise non-literal terms. Thus, for example, some philosophers and theologians seem to suppose that it is acceptable to claim that a monotheistic god is a 'person', an 'intelligent agent', a 'possessor of knowledge' and so forth, while nonetheless denying that it follows from these claims that a monotheistic god has something in common with the familiar people, intelligent agents, possessors of knowledge and so forth that we encounter in the physical universe that we inhabit. My way with this is, again, short. Our understanding of terms like 'knowledge', 'person', 'intelligence', 'good' and so forth depends upon our dealings with those familiar beings and agents to which these terms can be applied. Consequently, there is no sense to be made of the suggestion that we can extend the application of these terms to a being with which we have nothing in common: if a monotheistic god can properly be said to be a 'person', then that must be because that monotheistic god is relevantly similar to the people whom we encounter in our everyday lives. There is simply no way of giving content to the claim that a monotheistic god is a person unless we suppose that that god is relevantly like human people. Those who complain about unduly anthropomorphic conceptions of monotheistic gods are simply not entitled to the use of the word 'person' in the characterisation of the god in which they claim to believe.

Some philosophers and theologians seem to have supposed that we can give a literal and non-contradictory characterisation of the properties and attributes of a monotheistic god, but only in terms of 'what it is not'. Given the distinction between 'thin' and 'thick' conceptions of properties and attributes, there are two different ways in which this kind of view can be filled out. On the one hand, if we adopt a 'thin' conception of properties and attributes, then the idea is that a monotheistic god is characterised by falling under all and only the 'negative' non-relational predications that can

be made in any possible language that human beings might speak. On the other hand, if we adopt a 'thick' conception of properties and attributes, then the idea is that a monotheistic god is characterised by failing to possess any of the universals that can be expressed in any possible language that human beings might speak. Once again, I do not think that any view of this kind is defensible. We have already noted that – even granting that we can make sense of the distinction between 'positive' and 'negative' properties and attributes – it is simply untenable to suppose that there is any being that fails to possess any 'positive' non-relational properties or attributes. But, if that is right, then it seems that the alleged 'characterisation' of a monotheistic god must be importantly incomplete: it must be that a monotheistic god possesses some 'positive' properties, albeit 'positive' properties of which we can form no conception. But – on any plausible account of 'positive' properties – the possession of 'positive' properties is itself 'positive': and so it seems that the characterisation of a monotheistic god that we are now considering collapses under the weight of self-contradiction.

As we noted – at least *inter alia* – above, there are many properties and attributes that have been widely attributed to monotheistic gods. Thus, for example, there are many philosophers and theologians who have been prepared to suppose that there is a monotheistic god that possesses one or more of the following properties and attributes: perfection, infinity, simplicity, eternity, necessary existence, self-explanatory existence, freedom, fundamentality, incorporeality, impassibility, dominion, omnipotence, omniscience, omnibenevolence, omnipresence, absolute independence, perfect beauty, mind, agency, personality, perfect goodness, perfect love, perfect compassion, worshipworthiness, trinity, incarnation and so forth. Of course, it should not be assumed without argument that a clear interpretation can be given to all of the alleged properties and attributes that appear on this list: a closer examination might reveal that many of these properties are self-contradictory, mutually contradictory or otherwise not possessed of determinate content. However, there is at least a rough sense in which we can suppose that the above list provides a reasonable representation of non-relational properties and attributes that are often claimed to be possessed by monotheistic gods.

1.4 Taxonomy

The properties that are often attributed to God can be divided into various categories. Among the divisions to which we might pay attention in drawing up a taxonomy, there is at least (1) the division between the

relational and the *non-relational*; (2) the division between the *shared* and the *unshared*; (3) the division between the *reactive* and the *non-reactive*; (4) the division between the *descriptive* and the *evaluative*; (5) the division between the *specific* and the *generic*; and (6) the division between the *modifying* and the *non-modifying*. I shall not attempt to give an account of these divisions; what I have in mind should be clear enough from the taxonomy. I shall also not attempt to find examples that fit every cell in the table that is generated on the assumption that each of these divisions is orthogonal to all of the others.

(1) Some of the properties that are often attributed to God are attributed using 'modifying' terms: 'infinite', 'perfect', 'maximal', 'greatest', 'supreme' and the like. These properties can be attributed directly to God: 'infinite being', 'perfect being', 'maximal being', 'greatest being', 'supreme being' and so on. These properties can also be used to modify the attribution of what we might call 'base properties' to God: 'maximal power', 'perfect wisdom', 'infinite goodness', 'greatest love', 'supreme understanding' and so forth. In these cases, there is compelling reason to suppose that the base properties – power, wisdom, goodness, love, understanding and so forth – are also properly attributed to God. After all, that something is maximally powerful entails that it is powerful; that something is perfectly wise entails that it is wise; that something is infinitely good entails that it is good; that something is unsurpassably loving entails that it is loving; and that something is supremely understanding entails that it is understanding, and so on. Of course, if something is maximally powerful, then there will be circumstances in which it is inappropriate to *say* that it is powerful: for there will be circumstances in which to say that it is powerful will be to *implicate* that it is not maximally powerful. But this consequence of the Gricean maxims of relevance and maximal informativeness is in no tension with the claim that anything that is maximally powerful is powerful. Two further 'modifiers' that should also be mentioned here are 'all' and 'omni': these expressions are used to generate new compound expressions that have similar import to the expressions mentioned above: all-knowing, omniscient, all-powerful, omnipotent, all-present, omnipresent and so forth.

(2) Some of the properties that are often attributed to God are non-relational descriptive properties that are taken to be unique to God, i.e. to be properties that are not shared with anything else: simplicity, eternity, self-existence, self-explanation, necessity, indestructibility,

impassibility and so forth. For many of the properties in this class there are special difficulties involved in their understanding. Some contemporary theists claim to be unable to make any sense of claims about divine simplicity, divine self-existence, divine self-explanation, divine necessity and the like. Some contemporary theists claim that, to the extent that they can make sense of claims about divine eternity, divine indestructibility, divine impassibility and so on, they may not be inclined to accept these claims. In particular, for example, those who think that it is proper to attribute reactive evaluative properties to God often take themselves to have good reason to deny that God is impassible.

(3) Some of the properties that are often attributed to God are non-relational descriptive properties that are also shared with other beings: personality, agency, consciousness, mindedness, spiritedness, freedom and the like. For many theists, these properties have particular importance because they ground the claim that human beings are made in the likeness of God. For other theists, however, these claims – and the consequent claims about the ways in which human beings are made in the likeness of God – are problematic, because idolatrous: these claims improperly diminish the distance between God and humanity. Those in the former group may retort that if we do not make some genuine claims about personality, agency, consciousness, mindedness, spiritedness, freedom and the like, then we are in no position to understand how God could have the generic relational descriptive properties that almost all theists wish to attribute to God: being creator, ground, source and so forth. While some theists demur, many accept that we can make no sense of the idea that mere abstract principles can be causally efficacious.

(4) Some of the properties that are often attributed to God are generic relational descriptive properties: creator, ground, source and so on. In particular, these kinds of generic relational descriptive properties are often taken to relate God to everything else: God is the creator of everything else, or the ground of everything else, or the source of everything else and so forth. More carefully: these kinds of generic relational descriptive properties are taken to relate God to everything else that is capable of standing in a relation of this kind: God is the creator of every existing thing that is capable of being created, or the ground of every existing thing that is capable of having a ground, or the source of every existing thing that is capable of having a source, and so on. While theists typically agree that God is the creator, or

ground, or source, of everything else that belongs to the causal order, theists may disagree about whether God is the creator, or ground, or source of things that belong to what we might call 'the abstract order': numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects, properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects and so forth. If some of these things exist independently of God, then they do not fall within the scope of God's creative act.

(5) Some of the properties that are often attributed to God are non-reactive evaluative properties: good, just, beautiful, rational, wise, worthy of worship and so forth. The properties in this category are particularly significant for most theists. In particular, there are many theists who suppose that there is some sense in which the existence of God ensures that, in the end, everything is good, and just, and beautiful. If there is no ultimate judge and adjudicator, then there is virtue that goes unrewarded, and vice that goes unpunished; but if there is an ultimate judge, then it can be that no virtue goes unrewarded, and no vice goes unpunished. If there is no wise and rational architect, then there is no ultimate sense to be made of things that happen in our universe, no greater purpose that is subserved by our suffering and pain; but if there is a wise and rational architect, then it can be that the things that happen in our universe make ultimate sense, and it can be that there is some greater purpose that is subserved by our suffering and pain. If there is no supreme artist, then much of our universe, and what happens within it, is ugly or indifferent; but if there is a supreme artist, then it can be that there is a perspective from which our universe, and everything that happens within it, can be seen to be beautiful.

(6) Some of the properties that are often attributed to God are reactive evaluative properties: sympathy, benevolence, providence, jealousy, anger and the like. While there is clear scriptural foundation for the attribution of reactive evaluative properties to God – and while it is clear that there is much in the psychology of 'ordinary' or 'everyday' religious belief, and religious believers, that depends upon the attribution of reactive evaluative properties to God – there is a long-standing theological tradition which denies that God does really have reactive evaluative properties. On the one hand, there are evident problems in reconciling God's possession of reactive evaluative

properties with God's being impassible. On the other hand, there are also evident problems in reconciling God's possession of reactive evaluative properties with God's omniscience and providence, if God's omniscience is supposed to include a complete knowledge of the future, and God's providence is supposed to involve his choosing this world in full view of all of the things that the creatures in it would do.

(7) Some of the properties that are often attributed to God are specific descriptive relational properties: interventions in the course of mundane events – performing miracles, granting religious experiences, answering petitionary prayers and so forth; performance of eschatologically and soteriologically significant actions – rewarding the faithful with eternal life, condemning the wicked to eternal misery and the like – and so on. As in the case of reactive evaluative properties, there is clear scriptural foundation for the attribution of specific descriptive relational properties to God. But, as in the case of reactive evaluative properties, there are theists who hesitate to attribute miracles, and 'religious experiences', and answers to petitionary prayer, and specific acts of post-mortem reward and punishment to God. On the one hand, some theists suppose that it would be morally wrong for God to do some of these kinds of things; on the other hand, some theists suppose that it is somehow cheap or idolatrous to suppose that God would do some of these kinds of things.

Given the extensive list of properties that have been attributed to God, we cannot hope to canvas all of them in a single volume. Instead, we shall examine a representative sample, bearing in mind that some of these properties have been examined, at least *inter alia*, in *Arguing about Gods*. In particular, I shall not attempt to discuss miracles, or religious experience, or petitionary prayer, or post-mortem reward and punishment, or reactive evaluative properties – sympathy, benevolence, providence, jealousy, anger and the like – in the present work.

In turn, I shall discuss: infinity; perfection; simplicity; eternity; necessity; fundamentality; omnipotence; omniscience; freedom; incorporeality; goodness; beauty; and truth. The primary goal of the discussion is clarity: I seek clear and intelligible accounts of these attributes. I do not pretend that the discussion is anywhere complete. I said in the Preface to *Arguing about Gods* that that work was an interim summary of my views on arguments about the existence of God. What follows is an interim summary of my thoughts about some divine attributes.

CHAPTER 2

Infinity

Oppy (2006a) contains an extensive discussion of the understanding and application of a conception of the infinite that is fundamentally mathematical: questions about the mathematically infinite are questions about the cardinality of collections, or the divisibility of time and space, or about the magnitude of measurable properties, and so forth. But – following the lead of Aristotle and other early philosophers – we might wonder whether the discussion of the mathematically infinite really does exhaust the discussion of the infinite. Is it the case that the concept of the infinite is, in all essentials, the concept of the mathematically infinite – or is it rather the case that the concept of the infinite is importantly ambiguous in such a way that we can also discern something that might properly be called a non-mathematical conception of the infinite?

2.1 Introductory considerations

There are some preliminary observations to be made about the current uses of the word 'infinite' and its cognates, about the etymology of the word 'infinite' and related words in other languages, and about the history of the use of the word 'infinite' and related words in other languages in the writings of philosophers and theologians over the centuries. After these preliminary observations, we shall be able to turn our attention to more substantive matters.

The words 'infinite' and 'infinity' have a number of overlapping uses and meanings. This overlapping of uses and meanings can – it seems – be explained, at least in part, by appeal to historical considerations. However, it is a matter for investigation whether this overlapping of uses and meanings constitutes an impediment to certain kinds of inquiries and theoretical activities. We might think of the following investigation as one kind of prolegomenon to a serious discussion of the proper uses of the words

'infinite' and 'infinity' – and the concepts that these words express – in religious and theological contexts.

2.1.1 Some etymological notes

According to reliable authority,[1] the origins of our words 'infinite' and 'infinity' can be traced back to the Greek word *peras* (πέρας), which can be translated by 'limit', or 'bound', or 'frontier', or 'border', and which has connotations of being 'clear' or 'definite'. The Greek word *apeiron* (ἄπειρον) – the 'negation' or 'opposite' of *peras* – thus can be understood to refer to that which is unlimited, or boundless, or – in some cases – unclear and indefinite.

When the word *apeiron* makes its first significant recorded appearance – in the work of Anaximander of Miletus – it is used to refer to 'the boundless, imperishable, ultimate source of everything that is' (Moore (1998: 772). Thus, in this early usage, the word *apeiron* has connotations – 'imperishable', 'ultimate source of everything' – that are quite separate – or, at any rate, separable – from considerations about the absence of 'limits', or 'bounds', or 'frontiers', or 'borders', or 'clarity', or 'definiteness'.

As Moore (1998: 773) points out, most of the Greeks associated much more negative connotations with *apeiron* than are evident in the early usage of Anaximander: for the Pythagoreans, and – at least to some extent – for Plato, *apeiron* 'subsumed … all that was bad …; it was the imposition of limits on the unlimited that accounted for all the numerically definite phenomena that surround us'. Again, on this kind of usage of the term, *apeiron* has connotations – 'chaotic', 'irrational', 'disorderly' – that are quite separate – or, at any rate, separable – from considerations about the absence of 'limits', or 'bounds', or 'frontiers', or 'borders', or 'clarity', or 'definiteness'.

Etymologically, 'infinite' comes from the Latin 'infinitas': 'in' = 'not', and 'finis' = 'end', 'boundary', 'limit', 'termination', 'determining factor', etc. So, to be 'infinite' is to be not possessed of an end, or boundary, or limit, or termination, or determining factor. There are actually two Greek terms – *apeiria* and *aoristia* – that are at least sometimes translated using the word 'infinite'. Etymologically, as noted above, to be 'apeiria' is to be in the state of having no end, or limit, or boundary; but to be 'aoristia' is to be without boundary, measure, decision, determination and so forth.

[1] See, for example, Barrow (2005), Benardete (1964), Moore (1990), Owen (1967) and Rucker (1982).

According to the – perhaps controversial – interpretation of Sweeney (1992), 'apeiria' can signify either absence of determination and form, or presence of infinite power, whereas 'aoristia' only signifies absence of determination because of absence of form.

2.1.2 Some historical notes

In the following brief discussion of the history of discussion of the infinite, we largely follow Sweeney (1992), which surveys the range of attributions of 'infinity' to monotheistic gods.

2.1.2.1 Aristotle

While there are various uses of these terms in pre-Socratic philosophy – for example, as noted above, in Anaximander's account of his first principle, reported in Plato's *Philebus* (16C, 23C), and Aristotle's *Metaphysics* 987a15–19 – we shall start our survey with the account of the infinite that is provided in the works of Aristotle.

There is discussion of the infinite in at least the following Aristotelian texts: *Physics* III, 4–8. 10; *Metaphysics* K, 10; *Metaphysics* L, 7; and *Concerning the Heavens* I, 5–7. Of these, the most important discussion is that in the *Physics*, where it seems that Aristotle divides that which can properly be said to be infinite into the following three categories: (1) that which is 'intrinsically' 'intraversable' – e.g. a point or a quality; (2) that which is 'intrinsically' 'traversable', but in which the process of 'traversal' is 'extrinsically' or 'metaphorically' 'endless' – e.g. the depth of the sea or a journey to Alpha Centauri; and (3) that which is 'intrinsically' 'traversable', and in which the process of 'traversal' is itself 'intrinsically' 'endless' either with respect to 'addition' – e.g. the natural numbers – or with respect to 'division' – e.g. a finite volume of space – or with respect to both 'addition' and 'division' – e.g. time. Of these three categories, it is really only the last that can properly be said to deserve the label 'infinite' – and, as many commentators have stressed, in this case we have a mathematical and quantitative concept of the infinite. Indeed, if we eliminate 'traversability' in favour of 'measurability' – thus dispensing with the metaphor of travel in favour of the more abstract and precise notion of measure – and then eliminate the notion of 'measurability' in favour of the notion of 'being possessed of finite measure' – thus dispensing with the ambiguous modal notion (measurable by whom?) in favour of an unambiguous non-modal notion – we arrive at what is plausibly the generic modern conception of the infinite: *that which lacks a finite measure*.

While it might be said that the analysis that Aristotle offers of the infinite is not very far removed from the generic modern conception of the infinite, there are conceptual associations that Aristotle makes in connection with the infinite that have a much more distant ring. As Sweeney notes, Aristotle associates finitude with intelligibility, actuality and perfection, whereas he associates infinitude with unintelligibility, potentiality, imperfection, privation and wholeness. According to Aristotle – at least on Sweeney's account – an infinite line is imperfect because it lacks endpoints, and hence can be neither measured nor described. Since Aristotle takes the Prime Mover to be perfect, he does not allow that it is infinite, though he does accept that the results of the exercise of the power of the Prime Mover – the rotations of the heavenly spheres – are infinite. If one says that the Prime Mover's power is infinite then, for Aristotle, one is not really providing an 'intrinsic' description of that power, but rather saying something about what is brought about by the exercise of that power. [2]

2.1.2.2 Plotinus

Against Aristotle – according to Sweeney – Plotinus supposes that 'form' and 'being' are always 'determining' or 'terminating'. Given that 'matter' is 'below' 'form' and 'being', it turns out that 'matter' is 'infinite' – 'imperfect' and not 'determined'. On the other hand, the 'One Itself' 'transcends' 'form' and 'being' – and all other 'forms' of 'determination' – being both 'infinite' and 'perfect'. While the 'One Itself' – the head of the neo-Platonic scale of being – is conceptually distinct from familiar monotheistic gods, it shares with them the feature that there is claimed to be a sense in which it, itself, can properly be said to be 'infinite'. Of course, one might well be given to think that this conception of 'the infinite' is only dubiously related to the key mathematical, quantitative concept that Aristotle analysed – but, nonetheless, we clearly do have a long historical tradition of use of the label 'infinite' to describe 'that which exceeds all forms of determination'.

2.1.2.3 Early Christian thinkers

According to Sweeney, Augustine, Pseudo-Dionysius, John Damascene, Gregory of Nyssa and others from that era agreed that God is 'infinite'. By this, it seems that they mean that God is 'all-powerful', 'eternal',

[2] One might well wonder whether it is really possible to make sense of the distinction between 'intrinsic' and 'extrinsic' characterisations of powers. However, I shall not attempt to explore this question here.

'immense', 'incomprehensible' and – perhaps – 'beyond being'. Philo claims that God is 'infinite' because 'incomprehensible', 'omnipotent' and 'all good'. Augustine says that that which is incorporeal is both complete and infinite: complete because whole, yet infinite because not confined by spatial location. John Damascene says that Divinity is both infinite and incomprehensible – and that this alone is comprehensible of Divinity. Once again, these uses of the term 'infinite' have very little relationship to the key mathematical quantitative concept that Aristotle analysed.

2.1.2.4 Medieval scholasticism

According to Sweeney, little attention was paid to the notion of the infinite by Christian authors between the tenth century and the middle of the thirteenth century. Many theologians failed to mention the attribute at all; and those who did seem to have mentioned it only in connection with God's incomprehensibility, or eternity, or deeds, i.e. the results of the exercise of God's powers. Bonaventure, Aquinas and other thinkers accepted Aristotle's account of quantitative infinity, and agreed that there is one world that is finite in extent. However, they also held that there is a conception of 'infinity' that applies directly to God, but that is not neo-Platonic in its formulation. Thus, for example, while Aquinas accepts the claim that 'forms' and 'acts' are 'determinative', he also holds that 'matter' and 'potency' are 'determinative', and not merely 'negations', or 'privations', or 'mental constructs' or the like. Anything that escapes the 'determinations' imposed by 'matter' and 'potency' is properly said to be both 'infinite' and 'infinitely perfect'. While the connection between 'incorporeality' and 'infinity' harks back to Augustine – and other early Christian thinkers – the connection between 'actuality' – 'absence of potency' – and 'infinity' seems to be something new. Of course, there is a serious question about the intelligibility of the application of the description 'without potency' – but we shall come to that in due course. On the account given by Aquinas, God is properly said to be 'intrinsically' 'infinite', because 'essentially lacking in any kind of potentiality'.[3]

[3] According to Sweeney (1992), no one prior to Richard Fishacre gives any evidence of having supposed that a monotheistic god could be 'intrinsically' infinite – i.e. roughly, not merely infinite in its relations to other entities, but infinite 'in itself'. Moreover, according to Sweeney (1992), it is not until Aquinas observes that 'matter or potency determines form' – because 'matter or potency limits the perfection of form' – no less than 'form determines matter or potency' – because 'form confers perfection on matter or potency' – that any philosopher or theologian arrives at a clear understanding of how it can be that a monotheistic god is 'intrinsically' infinite. For Aquinas – according to Sweeney (1992) – it is *because* a monotheistic god has no matter or potency that it can properly be said to be 'intrinsically infinite': it is not 'limited' or 'determined' by 'matter or potency'. I think

2.1.2.5 *Modernity*

There has been a proliferation of conceptions of divine infinity since the beginnings of early modern philosophy. Sweeney notes that some philosophers – for example Spinoza – suppose that God is infinite, being the underlying reality of which all else is mere mode or manifestation. Sweeney also notes that other philosophers – for example Mill, James and Whitehead – respond to Spinoza's contention that nothing other than God is real because nothing other than God is infinite, by insisting that God too is finite, and, in that way, allowing that there really are things other than God. Moving beyond Sweeney's account, it seems to me to be plausible to add that, in more recent times, there has been an increasing willingness, on the part of monotheistic philosophers and theologians, to suppose that at least some of the divine attributes are properly to be understood in terms of a quantitative, mathematical conception of the infinite. Thus, for example, there are philosophers – such as Swinburne (1977/1993) – who suppose that it is quite proper to describe God's knowledge as infinite because God knows infinitely many true propositions; and who suppose that it is quite proper to describe God's power as infinite because there are infinitely many actions that God could perform; and who suppose that it is quite proper to describe God's eternity as infinite because it endures for an infinite amount of time; and so forth. It is well known that Cantor's development of transfinite arithmetic had theological motivations, and that there are many subsequent philosophers and theologians who have supposed that there are respects in which God is actually mathematically infinite.

2.2 God and infinity

With these preliminaries out of the way, we can turn our attention to more substantive matters.

2.2.1 *A question for investigation*

Given the above account – and given the wide diversity of doctrinal allegiances of contemporary monotheists – it seems plausible to suppose that there are some contemporary monotheists who suppose that there

that one might well doubt whether the categories to which Sweeney here appeals – 'matter', 'form', 'potency', 'act', 'determination', 'limit' – are suitable to the kind of fundamental inquiry that metaphysicians pursue; however, I won't try to argue for this suspicion here.

is no sense in which mathematical infinity is properly predicated of God. However, it also seems to me to be plausible to suppose that there are many contemporary monotheists who suppose that it is perfectly proper to make 'extrinsic' attributions of the mathematically infinite to God, and that there are also many contemporary monotheists who suppose that it is perfectly proper to make 'intrinsic' attributions of the mathematically infinite to God.

Those who suppose that there is no sense in which mathematical infinity is properly predicated of God will likely suppose that the present investigation can have no implications for their conception of God – and perhaps they will be right to think this. However, on pain of incoherence, those who take this view will need to suppose that, wherever it is appropriate to make mathematically characterisable predications of God, God is finite: God has only a finite amount of power, a finite amount of knowledge, a finite amount of goodness and so forth. I shall consider further the question whether this is an objectionable consequence of this kind of view in the next section of this chapter.

Those who suppose that there is some sense in which mathematical infinity is properly predicated of God thereby have an interest in the outcome of the present inquiry. Even if they suppose that much talk of the 'infinity' of God is properly reinterpreted as talk about 'incomprehensibility', or 'eternity', or the like,[4] they nonetheless admit that they need a clear account of the mathematical infinite in order to give clear content to their conception of – and perhaps also to their arguments for the existence of – God. Moreover, this conclusion holds quite apart from the view that one takes about the viability – or otherwise – of the distinction between 'intrinsic' and 'extrinsic' predications of mathematical infinity of God.

As noted above, in current English we have the adjective 'infinite', the common noun 'infinity' and the proper noun 'the Infinite'. The standard use of the proper noun is 'as a designation of the Deity or the absolute Being'; and so, of course, there is one standard use of the adjective and the common noun that rides piggyback upon the standard use of the proper

[4] Sweeney (1992) frequently claims that philosophers and theologians used the word 'infinite' as a *synonym* for some other term, such as 'eternal', or 'all-powerful', or 'immense', or 'incomprehensible', or the like. On its face, this claim seems most implausible. Given the etymology of the word, one might suppose that one *can* use it as a synonym for an expression like 'unlimited', or 'unbounded', or 'unending', or the like – and that one can then use context to determine what aspect of your monotheistic god is said to fall under one of these expressions: 'unlimited in power', or 'unending in time', or 'unbounded in size', or whatever. But it is hard to see why one might think that such facts about usage establish that the word 'infinite' literally means the same as 'eternal', or 'omnipotent', or 'incomprehensible', or the like.

noun. It seems to me that it is plausible to see the current use of the proper noun 'the Infinite' as a direct descendent of Anaximander's use of the word *apeiron* with more or less the same connotations – 'imperishable', 'ultimate source of everything' – except, of course, that *apeiron* is personalised, i.e. taken to have personal attributes and attitudes, in Christian theology.

However, in current English we also have uses of the adjective and the common noun that are not obviously related to the standard use of the proper noun. In particular, there are uses of these terms in mathematics, including geometry, and applications of these terms to space and time, in which most of the connotations associated with the proper noun seem to play no role at all. While these uses of the term do have more or less clear connections to the absence of 'limits', or 'bounds', or 'frontiers', or 'borders', they have very little to do with considerations about the absence of 'clarity' or 'distinctness', and nothing at all to do with considerations about 'the ultimate, imperishable, source of everything'.

It is not clear to me whether this separation of considerations was achieved by the Pythagoreans and other earlier contributors to the discussion of infinity. Given their metaphysical belief that the positive integers are the ultimate constituents of the world, it is a plausible conjecture that they did not recognise the discussion of 'limits', or 'bounds', or 'frontiers', or 'borders' – and the application of these terms to, say, space and time – as a separate topic for investigation in its own right. But, whatever the truth about this matter may be, it seems that some of the contemporaries and immediate successors of the Pythagoreans *did* come to see the discussion of these topics as an independent subject matter. It is, I think, plausible to view Zeno's paradoxes as a contribution to such a discussion; and, even if that is not so, it is surely right to see Aristotle's treatment of infinity as an investigation of 'limits' and 'bounds' – in the context of space, time and matter – in their own right. (In *Physics*, Book III, Aristotle makes mention of Anaximander's views about 'the ultimate source of everything'. But those views are entirely incidental to the theory of 'limits' and 'bounds' that Aristotle proceeds to elaborate and defend.)

However, once it is recognised that the investigation of 'limits' and 'bounds' – in the context of space, time and matter – is a legitimate subject matter in its own right, then various questions arise about the application of the results of *that* investigation to the subject matter with which Anaximander was primarily concerned: 'the ultimate source of everything'. Even if it is true – as I think it is – that the historical entanglement of talk about 'limits' and 'bounds' with talk about 'the ultimate source of everything' persists into the present, it is important to ask whether this

entanglement has any *essential* significance for either the investigation of 'limits' and 'bounds' as a subject matter in its own right, or for the investigation of 'the ultimate source of everything' (as a subject matter in its own right).

Prima facie – at least! – there seems to be good reason to think that the investigation of 'the ultimate source of everything' has no *essential* or *ineliminable* significance for the investigation of 'limits' and 'bounds' as a subject matter in its own right. Modern logical, mathematical and physical theories depend upon no substantive theological assumptions. No serious, standard text in logic, or mathematics, or the physical sciences begins with a chapter on 'theological preliminaries' or 'theological assumptions'.[5] Moreover, the same point holds true for serious textbook discussions of infinities *in* logic, and mathematics, and the physical sciences: there is no theological prolegomenon that is *required* for examinations of Conway numbers, or renormalisation in quantum field theory, or Kripke models for intuitionistic logic, or any other particular topic in this domain.

But what about the other direction? Does the investigation of 'limits' and 'bounds' as a subject matter in their own right have some *essential* or *ineliminable* significance for the investigation of 'the ultimate source of everything'? It is, of course, well known that some of those who have investigated 'limits' and 'bounds' as a subject matter in their own right have supposed that this investigation does have *important* consequences for the investigation of 'the ultimate source of everything'. (This is true, for example, of Cantor.) But the question that I wish to take up, in the remainder of this chapter, is whether it is true – and, if so, in what ways it is true – that those who wish to investigate 'the ultimate source of everything' need to equip themselves with the fruits of an investigation of 'limits' and 'bounds' as a subject matter in their own right.

2.2.2 Predicates and properties

There is a range of different views that those who believe that there is a unique 'ultimate source of everything' take concerning the language that they use when they talk about 'the ultimate source of everything'. We can

[5] Meyer (1987) offers a 'proof' that the claim that God exists is logically equivalent to the Axiom of Choice. However – even setting aside the evidence of tongue placed securely in cheek – it is clear that Meyer offers no more than a patch for *one* of the holes in the argument of Aquinas' second way. Lewis (1991) is typical of much technical literature in logic, mathematics and the physical sciences: it contains a range of references to God, but none that is *essential* to the theory of parts of classes that Lewis elaborates and defends.

illustrate some of the range of views by considering simple subject-predicate sentences of the form 'God is F', where 'F' is a relatively simple and unstructured predicate.

There are, of course, questions about the interpretation of the word 'God'. I gave an account in the preceding chapter which has it that the reference of the word 'God' is fixed by the description 'the one and only god'. Of course, this account leaves it open that there is nothing that satisfies the reference-fixing description; if there is nothing that satisfies the reference-fixing description, then the name is empty. I take it to be a consequence of this account that, if God exists, then God is the ultimate source of more or less everything else. However, I shall not insist on this account of the fixing of the reference of the word 'God', or on what I take to be the consequences of this account, in the present section of this chapter.

Among those who suppose that 'God' is not an empty name, there is a wide range of views about the *understanding* that it is possible for people to have of the properties that are possessed by the being that bears the name. Some suppose that we cannot grasp (apprehend, understand) *any* of the properties of God. Others suppose that we cannot *fully* grasp (apprehend, understand) any of the properties of God, but that we can have a *partial* or *incomplete* grasp (apprehension, understanding) of *some* of the properties of God. Yet others suppose that, while we can fully grasp (apprehend, understand) *some* of the properties of God, there are other properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp. And – perhaps – there are some who suppose that, while there are properties of God of which we remain – and will always remain – ignorant, there is no *logical* or *metaphysical* barrier to our grasping (apprehending, understanding) any of those properties. (There is, of course, a related range of views about the *knowledge* that it is possible for people to have concerning which properties are, in fact, possessed by the being that bears the name. Naturally, it should be borne in mind that it is one question whether we can (fully) understand (grasp, apprehend) a property, and quite another question whether we have what it takes to be able to determine whether or not God in fact *possesses* that property.)

The range of views concerning what it is possible for us to *say* about the properties that God possesses depends, in part, upon the views that we take about the understanding of God's properties, and, in part, upon the theory of predication – and, in particular, upon the theory of the relationship between predicates and properties – that we adopt. Amongst theories of properties and predication, the most important distinction for us – for

present purposes – is between *luxuriant* theories that suppose that every well-functioning predicate expresses a property (or universal) and *sparse* theories that suppose that there are many perfectly well-functioning predicates that fail to express properties (or universals) even though these predicates can be truly predicated of at least some objects. If we adopt a luxuriant theory of properties and predication, then we shall suppose that whenever we make a true claim of the form 'God is F', the predicate 'F' expresses a property that is possessed by God. However, if we adopt a sparse theory of properties and predication, then we can suppose that, at least sometimes, when we make a true claim of the form 'God is F', there is no property that is expressed by the predicate 'F' that is possessed by God.

If we suppose that we cannot grasp (apprehend, understand) *any* of the properties of God, and if we adopt a luxuriant theory of properties and predication, then it surely follows that we cannot say anything at all about God. Indeed, this combination of views seems incoherent; for, in order to fix the reference of the name 'God', we need to make use of some predicates that we take to be true of that which bears the name. (My preferred account makes use of the predicate '… is a god'.) If we claim that those predicates express properties, and yet also claim that we cannot grasp (apprehend, understand) any of the properties of God, then we have lapsed into self-contradiction.[6] Here, I assume that one does not understand a predicate unless one grasps (apprehends, understands) the property that is expressed by that predicate; if I do not know which property is expressed by a predicate, then I cannot make meaningful use of that predicate to express my own thoughts. (Note, by the way, that I am not here assuming that the property that is expressed by a predicate is required to be the *literal* content of the predicate. It could be that, in the case in question, the use of the predicate is *metaphorical* or *analogical*. However, I am assuming that one does not grasp (apprehend, understand) a metaphorical or analogical use of a predicate unless one understands *which* property is being attributed to the subject of the predication by the metaphor or analogy in question. This is not quite rejection of the view that there can

[6] There are many complex issues – concerning, in particular, the doctrine of divine simplicity – that arise here. If we suppose that there must be unity of truth-makers for claims involving simple predicates, then it seems to me that the doctrine of divine simplicity stands refuted unless we allow that we can grasp *the* divine property. However, if we allow that there can be diversity of truth-makers for claims involving simple predicates, then perhaps we can allow that there is a sense in which we understand simple predications that are made of God – since we understand the words that are used in making these predications – even if there is another sense in which we don't understand these predications – because we cannot fully understand that in virtue of which these predications are true. In the remainder of this chapter, I shall ignore considerations about divine simplicity.

be irreducible (essential) metaphors or analogies; however, it is the view that, where there are irreducible (essential) metaphors or analogies, these arise because of limitations upon our powers of *representation* and *expression*, and not because of limitations upon our powers to grasp (apprehend, understand) the properties that are possessed by things.)

If we suppose that we cannot grasp (apprehend, understand) any of the properties of God, and if we adopt a sparse theory of properties and predication, then there will be things that we can say truly of God. Perhaps, for example, we can truly say that God is self-identical, while denying that there is any such thing as the property (universal) of 'being self-identical'. While this view does not collapse quite so immediately into self-contradiction, it is not clear that this view can be seriously maintained. In particular, it seems doubtful that one can plausibly allow that the predicates that are used in reference-fixing descriptions – and the predicates that are entailed by those predicates that are used in reference-fixing descriptions – fail to express properties. Consider Swinburne's definition. Any being that is omnipotent, omniscient, perfectly good and creator of the world *ex nihilo* will be good, powerful, possessed of knowledge, creative and so forth (i.e. will be such that the predicates 'good', 'powerful', 'possessed of knowledge', 'creative' and so forth can be truly predicated of it). But can it be plausibly maintained that *none* of these are properties (universals)? Sparse theories of properties (universals) must satisfy the constraint that, among the properties (universals) over which they quantify, there are those properties (universals) that constitute the basic building blocks for *our* world. It is not, I think, plausible to suppose that not one of the predicates that can be truly applied to God expresses a property (universal).

The view that, while we cannot *fully* grasp (apprehend, understand) any of the properties of God, we can have a *partial* or *incomplete* grasp (apprehension, understanding) of *some* of the properties of God, seems to me to be subject to much the same kinds of difficulties as the view that we cannot grasp (apprehend, understand) any of the properties of God. On the one hand, if we adopt a luxuriant theory of properties and predication, then this view will have us saying that we have no more than a partial or incomplete grasp (apprehension, understanding) of such properties as self-identity, existence, uniqueness and the like. And, on the other hand, even if we adopt a sparse theory of properties and predication, then this view will have us saying that we have no more than a partial or incomplete grasp of the properties that are expressed by predicates such as 'is good', 'knows', 'is powerful', 'is creative' and the like. Neither of these views seems to me to be at all attractive.

Once we proceed to views that allow that we can fully grasp (apprehend, understand) *some* of the properties of God, the kinds of difficulties that we have been exploring thus far lapse. So long as we allow that the properties that we appeal to – or that are entailed by those properties that we appeal to – in fixing the reference of the name 'God' are among the properties that we can fully grasp (apprehend, understand), then we have no (immediate) reason to fear that our theory of the fixing of the referent of the name 'God' is self-contradictory, or incoherent, or evidently inadequate. Certainly, this is clear if we allow that *all* of the properties that we appeal to – *and* that are entailed by those properties that we appeal to – in fixing the reference of the name 'God' are among the properties that we can fully grasp (apprehend, understand). But, plausibly, the consequence remains clear even on weaker readings of the condition: if all the properties that we appeal to – and all of the properties that we *in fact* infer from those properties that we appeal to – in fixing the reference of the name 'God' are among the properties that we can fully grasp (apprehend, understand), then we have no reason to fear that our theory of the fixing of the referent of the name 'God' is self-contradictory, or incoherent, or evidently inadequate. Indeed, it *may* even be plausible that the consequence remains on *much* weaker readings of the condition: for the most important constraint here is just that our theory of the fixing of the reference of the name 'God' should not impute partial or incomplete grasping (understanding, apprehension) of predicates in cases where we have good independent reason to insist that there is full grasp (understanding, apprehension) of those predicates. And, of course, *this* constraint can be satisfied even if some of the predicates that are used in the fixing of the reference of the name 'God' are only partially or incompletely grasped, and even if many of the predicates that are entailed by the predicates that are used in the fixing of the reference of the name 'God' are only partially or incompletely grasped, so long as there are some *other* predicates that can be truly applied to the object picked out by the reference-fixing description that are fully grasped.[7]

[7] There are a number of interesting questions to be raised here about the propriety of using reference-fixing descriptions that contain predicates that one does not fully understand. There are also interesting questions here about the relationship between entailment and (full) understanding, and the relationship between devising analyses and possessing (full) understanding. And, perhaps most importantly of all, there are fundamental questions to ask about what is involved in the full – and in the partial or incomplete – grasping (understanding, apprehension) of properties. Much work remains to be done to achieve clarity on all of the relevant issues that arise in connection with these questions.

Of course, the discussion to this point does not exhaust the questions that arise concerning the views that those who believe that there is a unique 'ultimate source of everything' take concerning the language that they use when they talk about 'the ultimate source of everything'. In particular, I have said nothing thus far about the view that there are properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp. This view is the subject of the next section.

2.2.3 *Understanding properties*

There are various foundational debates about properties and predicates that have so far gone without mention in our discussion. Amongst these hitherto undiscussed debates, the most important for present purposes are (1) the various debates about the tenability of quantification over predicate position; and (2) the debates about whether there is a non-pleonastic sense in which predicates have properties as semantic values. In the previous section of this chapter, the discussion takes it for granted that there is a non-pleonastic sense in which predicates have properties as semantic values – the idea that there is a distinction between luxuriant and sparse theories of properties lapses if this assumption is rejected – and the discussion also takes it for granted that we can make intelligible quantification over predicates, talking freely about the existence of properties of various kinds, and so forth. If either, or both, of these suggestions is rejected, then we shall need to seriously reconsider the terms of that previous discussion.

If we reject the claim that there is a non-pleonastic sense in which predicates have properties as semantic values – and if we adopt, instead, the proposal that properties are no more than the ontological shadows of meaningful predicates – then it is not clear that we can even make sense of the idea that there are properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp. If to be a property is just to be the ontological shadow of a meaningful predicate in a human language, then there are no properties that elude our understanding. While the claim that the expressive power of our language is susceptible of indefinite improvement is perhaps consistent with the suggestion that there are no properties that elude our understanding, it is not clear that the claim that the expressive power of our language is susceptible of indefinite improvement is of itself sufficient to establish the further claim that, as a matter of logical or metaphysical

necessity, we have only a partial or incomplete understanding of God. At the very least, it seems to me that some investigation is needed of the consequences of deflationary semantics for the claim that there are properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp.

If we reject the claim that there can be intelligible quantification over predicate position – or even if we insist on the claim that the best choices for canonical notation and logic are based on languages in which there is no quantification over predicate position – then, again, it is not clear that we can even make sense of the idea that there are properties of God of which we can, as a matter of logical or metaphysical necessity, have no more than a partial or incomplete grasp. If we cannot intelligibly quantify over predicate position, then we cannot make sense of any claim of the form 'there are properties of God which …', and hence, in particular, cannot make sense of the claim that there are properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp. While there are reasons to think that we should allow that quantification over predicate position is not merely intelligible but actually acceptable – and, indeed, required in order to allow us to say some of the things that we want to be able to say – a fully carried out project into the foundations of claims about God and infinity would need to include some investigation of these matters.

Suppose, however, that we allow that there is a non-pleonastic sense in which predicates have properties as semantic values, and that there can be intelligible quantification over predicate position – and, perhaps, that the best choices for canonical notation and logic are based on languages in which there is quantification over predicate position. What should we then say about the claim that there are properties of God of which we can – as a matter of logical or metaphysical necessity – have no more than a partial or incomplete grasp? While we cannot hope to adequately address this problem here, perhaps we can make a few useful preliminary observations.

From the outset, it is important to distinguish between the claim that it is logically or metaphysically necessary that there are properties of God of which we can have no more than a partial or incomplete grasp, and the claim that there are properties of God of which it is logically or metaphysically necessary that we can have no more than a partial or incomplete grasp. The former claim could, for example, be true of things other than God if, for example, those things have infinitely many logically independent properties and we are only capable of fully and completely grasping

a finite range of properties; and the former claim could be true of things other than God if there is no upper bound to the number of logically independent properties that are possessed by different things, but there is an upper bound to the number of properties that we can fully and completely grasp; and so forth. On the other hand, the latter claim can only be true if there is something about the nature of a particular property that causes it to be the case that that property is resistant to our full and complete understanding. I take it that it is this latter claim that is primarily of interest to us in the present context.

It is often said – or suggested, or implied – that there are properties of God that are resistant to our understanding in the sense that we cannot understand what it would be like to possess those properties. So, for example, it is sometimes said that we cannot understand what it would be like to be omniscient. (We might think that Dennett (1991: 398–411) uses this observation in order to undermine the knowledge argument against physicalism: because we do not know what it is like to be omniscient, we are in no good position to judge what Mary would know if it were true that she knew all the physical truths about the world.) However, I take it that this kind of ignorance – ignorance about what it would be like to possess a certain kind of property – is perfectly compatible with full and complete knowledge about which property it is that is in question. Supposing that, for example, it is true that to be omniscient is to know every proposition that it is logically possible for one to know, *given that* there are the weakest possible constraints on what it is logically possible for one to know, then one can have full and complete knowledge about what omniscience is even if one cannot even begin to imagine (picture, 'understand from the inside') what it would be like to be omniscient.

Once we have the distinction between (1) the possession of full and complete knowledge of what a property F *is* and (2) the possession of full and complete knowledge of what it would be *like* to possess property F, we can apply this distinction to the question whether we should want to assent to the claim that there are properties of God of which it is logically or metaphysically necessary that we can have no more than a partial or incomplete grasp. As we noted in the previous paragraph, it seems quite reasonable to allow that there are properties of God of which it is logically or metaphysically necessary that we have no more than a partial or incomplete grasp of what it would be *like* to possess those properties. However, it is much less obvious that it is reasonable to allow that there are properties of God of which it is logically or metaphysically necessary that we have no more than a partial or incomplete grasp of what those properties

are. At the very least, I think that it is clear that there is room for much further fruitful investigation of this issue.

2.2.4 Infinite domains and infinite degrees

At the end of the first section of this chapter, I said that the primary question to be investigated herein is whether it is true – and, if so, in what ways it is true – that those who wish to investigate 'the ultimate source of everything' need to equip themselves with the fruits of an investigation of 'limits' and 'bounds' as a subject matter in their own right. *Prima facie*, at least, there are various syntactically simple claims that many believers have been inclined to make that suggest that those who wish to investigate 'the ultimate source of everything' *do* need to equip themselves with the fruits of an investigation of 'limits' and 'bounds' as a subject matter in their own right. On the one hand, believers often claim that God is infinite. On the other hand, believers often claim that God is omnipotent, and omniscient, and omnipresent, and eternal, and perfectly good, and sole creator of the universe, and so forth. All of these claims, when interpreted in a straightforward and literal way, strongly suggest that believers must actually be relying upon the results of investigations of 'limits' and 'bounds' as subject matters in their own right.

Now, of course, it might be said that these various claims should not be interpreted in a straightforward and literal way. However, I take it that the discussion in the previous two sections of this chapter strongly supports the view that believers ought not to take such a line. While believers can perfectly well maintain that a *complete* characterisation of God is beyond our imaginative and conceptual capacities, such believers are obliged to allow that we have the capacity to provide an intelligible – literal, straightforward – description that fixes the referent of the name 'God'. Of course, some will not be persuaded that this is so. No matter; those not persuaded should think of this inquiry as conditional in form: what should those who suppose that it is straightforwardly and literally true that God is omnipotent, and omniscient, and omnipresent, and eternal, and perfectly good, and sole creator of the universe, and so forth, allow that investigations of 'limits' and 'bounds' as subject matters in their own right contribute to their understanding of these claims?

There are straightforward ways in which literal interpretations of the claims that God is omnipotent, God is omniscient, God is omnipresent, God is eternal, God is perfectly good, God is the sole creator of the universe, and so forth, *suggest* involvement with investigations of 'limits' and

'bounds' as subject matters in their own right. To say that God is omnipotent is, at least roughly, to say that it is within God's power to do anything that it is logically possible for God to do. To say that God is omniscient is, at least roughly, to say that God knows the truth status of every proposition for which it is logically possible that God knows the truth status of that proposition. To say that God is omnipresent is to say that every spatio-temporal location is present ('available') to God. To say that God is eternal is to say that every time is present ('available') to God. (Some say, rather, that God is sempiternal, i.e. that God exists at every time. My formulation here is neutral on the question whether God is *in* time.) To say that God is perfectly good is to say, *inter alia*, that there is no moral obligation, or moral duty, or moral good to which God fails to pay due accord. To say that God is the sole creator of the universe is to say that God is the sole original creator of all contingently existing things. And so forth. In every case, the attribution of one of these properties to God brings with it quantification over a domain of objects – and, in each case, there is then a serious question to address concerning the measure or cardinality of that domain.

Consider the case of omniscience. If we suppose that God knows the truth status of every proposition for which it is logically possible that God knows the truth status of that proposition,[8] then a natural question to ask is: how many propositions are there concerning which God knows the truth status? Before we try to investigate the question, we need to tighten it up a little. In the case of human beings, it is a reasonable conjecture that there is a quite small bound on the number of propositions that are *explicitly* represented by a human agent over the course of a typical human life. Of course, it *might* be that the finite number of propositions that are explicitly represented over the course of a typical human life *entail* an infinite number of propositions that *might* then be said to be implicitly represented over the course of a human life. However, at least on standard accounts of divine knowledge, there is no corresponding distinction in the case of God's knowledge: every proposition that God knows is a proposition of which God has explicit representation (or, perhaps better, direct acquaintance). But if every proposition that God knows is a proposition of which God has explicit representation (or with which God has direct

[8] Note that if we suppose that God knows the truth status of every proposition for which it is logically possible that God knows the truth status of that proposition, we do not suppose – but rather take no stance on the claim – that there are propositions for which it is not logically possible that God knows their truth status. My formulation here is meant to be neutral on, for example, the question whether Gödel's limitative theorems would have application in the case of God.

acquaintance), and if God knows the truth status of every proposition for which it is logically possible that God knows the truth status of that proposition, then one might think that there is good reason to suppose that God has explicit representation of (or direct acquaintance with) infinitely many distinct propositions. For, at the very least, it seems *implausible* to suppose that there are only finitely many distinct propositions concerning which God can have knowledge of truth-value.

There are, of course, many subtleties here. While those of us of a Platonist bent may be inclined to suppose that even a natural language such as English has the capacity to represent infinitely many distinct propositions – consider, for example, the propositions expressed by the sentences *1+1=2*, *1+2=3*, *1+3=4*, etc. – there will be at least some radical finitists who deny that this is so. (Perhaps, they might say, there is no good reason to suppose that the operations that are invoked in the 'specification' of infinite lists of well-formed sentences of English are total!) Moreover, while those of us of a Platonist bent may also be inclined to suppose that there *are* infinitely many distinct propositions that could be expressed by sentences of English, there will be at least some intuitionists and constructivists who deny – at least in the case of the example given above – that there are propositions that exist independently of the actual construction or tokening of the relevant sentences in some language. (Perhaps, that is, they might say, there is merely a potential infinity of propositions that can be expressed by sentences of English.) However, regardless of the correct position to take concerning the expressive capacities of natural human languages such as English, there are also questions about the nature of the representational properties that are attributed to God that also need to be taken into account. If we suppose – as standard Christian theology would have it – that there is nothing *potential* in God, then it seems that there is good reason to deny that it is possible to apply a constructivist or intuitionistic – or even radically finitist or formalist – account of mathematical truth and mathematical ontology to God's knowledge or to the propositions that are known by God. Of course, we might wonder whether it is appropriate to suppose that God has a language of thought – or, indeed, whether it is appropriate to suppose that God has beliefs or other representational states of that kind – but, no matter how these matters are resolved, it seems at least *prima facie* plausible to suppose that the attribution of omniscience to God will lead us to claim that there *are* infinitely many distinct propositions that are known to God. (We shall return to the consideration of some of the relevant subtleties that are raised by the discussion of omniscience in the next section.)

What goes for omniscience goes for the other properties that I listed above. On plausible interpretations of the simple subject-predicate sentences that I listed, it is highly natural to suppose that the truth of any one of those sentences brings with it a commitment to infinite domains of objects and/or infinite magnitudes of degreed properties. At the very least, it is *prima facie* plausible to suppose that there are infinitely many different possible actions that an omnipotent being can perform, and that there are infinitely many different tasks that have been carried out by a sole creator of all contingently existing things; and it is *prima facie* plausible to suppose that a four-dimensionally omnipresent being is present to an infinite volume of space-time (and this because it is plausible to suppose that the universe is open in the future); and it is *prima facie* plausible to suppose that an eternal being is present to an infinite extent of times (again because it is plausible to suppose that the universe is open in the future); and it is *prima facie* plausible to suppose that a perfectly good creator has created a world of infinite value (because it would be unworthy of such a being to create a world of lesser value than some other world that it might have created); and so forth. Moreover, of course, the commitment to infinite magnitudes of degreed properties seems evident on its face in the case of the claim that God is infinite (though see the following section for discussion of some of the difficulties that are raised by this claim).

There has been considerable recent philosophical activity that has sought to apply mathematical discussions of infinity to the divine attributes that are currently under discussion. In particular, there is a considerable literature on omniscience that draws upon Cantorian theories of the infinite (mostly drawing upon or discussing ideas that were first canvassed by Patrick Grim (1991)). However, even in the case of omniscience, there has been no *systematic* study of the kind that would be needed to address the kinds of questions that I have been raising in the present section of this chapter. There is a large programme of research here waiting to be carried out.

2.2.5 God and infinity

Amongst the various claims listed for consideration in the previous section, the claim that *God is infinite* raises special difficulties. As we noted initially, some might suppose that this claim is only to be interpreted in a loose or metaphorical sense: what it really means to say is that God is imperishable, or unchanging, or the source of everything, or the like. Of

course, if this is all that the claim that God is infinite is taken to really mean, then understanding of the claim that God is infinite will not be enhanced by considerations drawn from an investigation of 'limits' and 'bounds' as subject matters in their own right. But I do not think that it is plausible to suppose that this is all that those who now claim that God is infinite mean to assert; certainly, it is not all that *many* of those who now claim that God is infinite mean to assert. From this point, I shall proceed under the assumption that those who claim that God is infinite mean to assert something that is susceptible of explanation in terms of considerations drawn from an investigation of 'limits' and 'bounds' as subject matters in their own right.

Perhaps the most plausible way to interpret the claim that God is infinite is to take it to be the claim that God is infinite in certain respects. Some might think that it should be taken to be the claim that God is infinite in *every* respect; but – unless we have some very subtle way of determining what counts as a respect – it seems likely that this further claim will have untoward consequences. For example, there are few who would wish to claim that God has infinitely many parts; or that God consists of infinitely many distinct persons; or that God has created infinitely many distinct universes; or the like. And surely there are *none* who would wish to make contradictory claims – for example that God is infinitely small and infinitely large; or infinitely heavy and infinitely light; or infinitely knowledgeable and infinitely ignorant; and so forth. But, if we take the claim that we are interested in to be the claim that God is infinite in *certain* respects, then, of course, we shall naturally wish to inquire about the nature of those relevant respects.

One natural thought is that, for any degreed property that it is appropriate to attribute to God, God possesses that property to an infinite degree. However, there are reasons for thinking that this thought is not obviously correct. Suppose that God is three-dimensionally omnipresent, and that three-dimensional omnipresence is taken to be understood in terms of presence to every volume of space. It should not be a consequence of the claim that God is infinite that God is present to an infinite volume of space – for it may be that we want to deny that it is even possible for the volume of space to be infinite; and, even if we do not wish to deny that it is possible for the volume of space to be infinite, we should surely allow that we do not currently have overwhelming reason to think that the spatial volume of our universe is infinite. Yet the property of being present to a volume of n m^3 *is* a degreed property: something could be present

to a volume of 1 m^3; something could be present to a volume of 2 m^3; something could be present to a volume of 3 m^3; and so forth.

The fix here is not hard to see. Rather than suppose that, for any degreed property that it is appropriate to attribute to God, God possesses that property to an infinite degree, we should say rather that, for any degreed property that it is appropriate to attribute to God, God possesses that property to the maximal or minimal possible extent that is consistent with the obtaining of other relevant facts, or else God possesses that property to an infinite degree. In the case of presence to volumes of space, God is present to the most inclusive volume of space; if that volume of space happens to be finite, then God is present to a finite volume of space – N m^3 – but there is nothing objectionable about the fact that God does not possess this degreed property to an infinite extent.

Some philosophers might have thought it preferable to try for a different fix. Suppose that we have some acceptable way of distinguishing between the intrinsic – or perhaps *non-relational* – properties of God and the extrinsic – or perhaps *relational* – properties of God. Then, amongst the degreed properties, it may seem right, at least initially, to say that whether extrinsic properties of God are infinite in degree can depend upon what it is that God is accidentally (contingently) related to under those properties. However, on this line of thought, it will then seem that whether the intrinsic properties of God are infinite in degree *cannot* depend upon what it is that God is accidentally (contingently) related to under those properties – since, by definition, those properties are non-relational – and so it will seem reasonable to insist that, in these cases, God must possess the properties to an infinite degree.

But consider, again, the example of God's knowledge. We have already seen that it is at least *prima facie* plausible to claim that there are infinitely many distinct propositions whose truth-value is known to God. But it does not *immediately* follow from this *prima facie* plausible claim that it is *prima facie* plausible to attribute some kind of infinite faculty to God. For whether we should say that we are here required to attribute some kind of infinite faculty to God *might* be thought to turn on whether we are required to attribute knowledge of the truth-value of infinitely many logically independent propositions to God. And – given that the attribution of omniscience requires that God knows (more or less) every logically independent proposition – that in turn would invite assessment of exactly how many logically independent propositions there are. Various subtleties now arise. What, exactly, do we mean by logically independent

propositions?[9] Are the propositions that it is possible that p and that it is possible that q logically dependent propositions for any propositions that p and that q? If we assume that the correct logic for modality is S5, then, for any proposition that p, if it is possible that p, then it is a necessary truth that it is possible that p. If we suppose that all necessary truths are logically dependent, then we shall arrive at the view that only some collections of contingent propositions are mutually logically independent. Yet, even if we accept the – controversial – assumptions required to arrive at this view, it is not clear whether we should then go on to draw the further conclusion that there are only finitely many logically independent propositions that are known by God. (Moreover, even if we do conclude that there are only finitely many logically independent propositions that are known by God, we might still think that, if there can be nothing potential in God, God is required to have explicit representations of infinitely many distinct propositions.)

If we suppose that God's omniscience requires that God is related to infinitely many contingently true propositions, and if we also suppose that this entails that God has infinitely many distinct explicit representations, then we might suppose that there are intrinsic properties of God that are infinite in degree, even though there is also a sense in which these intrinsic properties are dependent upon the world in which God is located. It seems plausible to think that the counting of representational states is an intrinsic matter – how many distinct representational states one has at a given time supervenes merely upon how one is at that time, and not at all upon how the rest of the world is – even though there are causal relations that hold between representational states and the world that contribute to the determination of how the number of distinct representational states that one is in varies over time. Thus, whether God is related to infinitely many contingently true propositions can be both a question about

[9] There are many important and interesting questions that arise here. In particular, there are questions about whether we can understand talk of 'logical independence' that is not tied to the specification of particular linguistic resources. If we specify a language and a proof theory (or model theory), then we can give an account of logical independence for the logical system thus specified. But what are we to make of talk of 'logical independence' that is not thus tied to specification of a particular logical system? There are other places in these notes where some will suppose that what is said makes no sense because these kinds of foundational questions about languages, syntax and interpretation have not been addressed. I take it that this points to yet another area of inquiry that cannot be avoided in a full examination of the implications for theology of investigations of 'limits' and 'bounds' as subject matters in their own right. (Some might think that there are also questions about the logic that is proper to discussion of God, just as some have supposed that there are questions about the logic that is proper to discussion of quantum mechanics. My own view is that classical logic is the proper logic for discussions of both quantum mechanics and God.)

an intrinsic property of God – how many distinct explicit representations does God have – and yet also a question about the world in which God is located (since the number of God's distinct explicit representations of contingently true propositions simply reflects the complexity of the world in which God is located).

If, then, we take the claim that God is infinite to be the claim that God is infinite in certain respects, then *perhaps* we can say something like the following: For any degreed property that it is appropriate to attribute to God, God possesses that property to the maximal or minimal possible extent that is consistent with the obtaining of other relevant facts, or else God possesses that property to an infinite degree.[10] If there is some sense in which a degreed property is relational, then it may be that whether that property is infinite in degree depends upon what it is that God is accidentally (contingently) related to under that property; but where there is no sense in which a degreed property is relational, it cannot be that whether that property is infinite in degree depends upon what it is that God is accidentally (contingently) related to under that property. Since it is possible for an intrinsic property to nonetheless be, in some senses, relational, it should not be thought that, merely because a degreed property is intrinsic, it cannot be that whether that property is infinite in degree depends upon what it is that God is accidentally (contingently) related to under that property.

Perhaps, though, we should not take the claim that God is infinite to be the claim that God is infinite with respect to *all* of an appropriately restricted class of degreed properties; perhaps, rather, we should take the claim that God is infinite to be the claim that God is infinite in *certain very particular* respects. I do not have any clear suggestion to make about what these very particular respects in which God is infinite might be; perhaps, though, further investigation of this line of thought might turn up some interesting results.

St Anselm refers to God by the formula 'that than which no greater can be conceived'. It is not impossible that one might think that the claim that God is infinite should be tied to the sense of greatness that is implicated in St Anselm's formulation. Surely St Anselm would have agreed with the claim that God is infinitely great; and surely it is not utterly implausible

[10] Even this formulation is at best provisional. I have already noted that 'consisting of N persons' is a degreed predicate. If we allow that it is possible that a being consist of three persons, how can we deny that it is possible that a being consist of four persons? Yet, somehow, the Christian theologian needs to be able to defend the claim that God consists of exactly three persons. I shall not speculate here about further refinements to the principle that I have begun to formulate.

to think that modern theories of mathematical infinity might be pressed into service in the understanding of this claim. Alas, however, it is not clear what sense should be interpreted to 'greatness' in Anselm's formulation. (Indeed, this is a much debated question in the recent literature on this topic.) Thus, while we might make progress on what is meant by '*infinitely* great', it is less clear that we will make progress on what is mean by 'infinitely *great*'. (I continue with this theme in the next section.)

Of course, it should not be thought that the above discussion exhausts the kinds of considerations – never mind the details of the considerations – that should be raised in the course of an examination of the claim that God is infinite, when that claim is given a straightforward, literal interpretation that draws upon the investigation of 'limits' and 'bounds' as subject matters in their own right. As in previous sections of this chapter, I claim to have done little more than to indicate where there is further work that needs to be done.

2.2.6 God and the transfinite

Throughout the chapter to this point, I have made free use of the expressions 'infinite' and 'infinity' in talking about domains of objects and magnitudes of degreed properties. But, of course, even if one grants that we can make sense of talk of 'infinite' domains of objects and 'infinite' magnitudes of degreed properties, one might insist that – in the light of the development of Cantor's theory of the transfinite – one needs to bring far more precision to this kind of talk than our initial discussion has recognised. In particular, given that there is a hierarchy of infinite cardinals, it seems that we need to ask about the particular infinite cardinals that might be thought to be appropriate to the characterisation of God's properties.

One way – among many – into this topic is by way of some reflection upon the theory of numbers developed in Conway (1976).[11] In Conway's system, there is a 'gap' – '**On**' – which lies at the end of the number line. Intuitively, **On** – i.e. {**No** | }, where '**No**' is shorthand for the entire number line – is 'greater' than all of the numbers, including, in particular, all of Cantor's infinite cardinals. Anything that has a magnitude that is properly characterised by **On** will have a magnitude that is not properly characterised by any number, however large.[12]

[11] For a reasonably brief exposition of Conway's theory, see Oppy (2006b: 42–4).

[12] There is at least a loose sense in which **On** can be identified with Cantor's 'absolute infinity'. Like Cantor's absolute infinity, **On** 'lies beyond' all of the transfinite numbers. However, there are

In Conway's theory of numbers – as in Cantor's theory of ordinal numbers – we have a sequence of numbers ordered by the 'greater than' relation, including a series of (special) limit ordinals that can be identified with the distinct infinite cardinals of Cantor's theory of cardinal numbers. Thus, if we are talking about 'infinite' quantities in the context of Conway's theory of numbers – or Cantor's theory of infinite cardinals – the question will always arise about the size of the infinity under consideration. Moreover, if one wishes to 'exceed' any limitations that might be placed upon size, then one will be driven to talk about things that are not properly considered to be numbers at all. (I suspect that this point is linked to the idea – to be found in many versions of set theory – that there are collections that form only proper classes and not sets, because they are 'too big' to be collected into sets.)

If, then, one is to say that God is 'infinite' in such and such respects – or that God is 'infinite' *sans phrase* – the question will always arise about the size of the infinity under consideration. Given the discussion above – in section 2.2.5 – one might think that the appropriate thing to say is something like this: for any degreed property that it is appropriate to attribute to God, God possesses that property to the maximal or minimal possible extent that is consistent with the obtaining of other relevant facts, or else God possesses that property to an unlimited (unquantifiable, proper-class-sized) extent. Under this reformulation, we allow that it is possible that God's possessing a given property to a certain maximal extent forces us to say that God possesses that property to a given infinite cardinal degree. (If, for example, there are $\aleph_{15}$ true propositions, then God knows $\aleph_{15}$ true propositions; in that case, God's knowledge is infinite, but it is not unquantifiably infinite.) However, we also allow that, at least until further considerations are brought to bear, it remains an open question whether God possesses some properties to an unquantifiable extent. (If, for example, there are proper class many – **On** – true propositions, then God's knowledge is unquantifiably infinite.)

There may be some pressures that nudge theologians in the direction of saying that God does possess at least some properties to an unquantifiable

claims that are sometimes made about Cantor's absolute infinity that are clearly not true of **On**. In particular, it should be noted that there is nothing inconceivable about **On**; and nor is it the case that **On** cannot be either uniquely characterised or completely distinguished from the transfinite numbers. (Cf. Rucker (1982: 53).) On the contrary, **On** is a gap rather than a number, and it is distinguished, in particular, by the fact that it 'exceeds' all of the transfinite numbers. (I think that the claims in question are no more plausible in the case of Cantor's absolute infinity; but it is, I think, even more clear that they are not plausible in the case of **On**.)

extent. Suppose, for example, that we accept Anselm's formulation: 'God is that than which no greater can be conceived.' Since it seems that we can conceive of creatures that possess some great-making properties that are of unquantifiable extent, there is at least some reason to suspect that we will be driven to the conclusion that God possesses those properties to an unquantifiable extent. However, once again, this is a matter for more careful investigation.

2.2.7 Checking for consistency

In the introduction to Oppy (2006a: xi), I hinted at the existence of an argument for the conclusion that 'there is no conception of the infinite that can be successfully integrated into relatively orthodox monotheistic conceptions of the world'. About this hint, I wrote: 'Since all that this brief introduction aims to do is to make it seem plausible that there is a *prima facie* interesting question to address, I shall leave further discussion of this argument to the future' (p. xiii). In this section of the present chapter, I reproduce the earlier discussion, and provide some further comments upon it (though certainly not on the scale envisaged in the just quoted remark).

Here is what I wrote:

> If we are strict finitists – and thus reject all actual and potential infinities – then we are obliged to say that God is finite, and that the magnitudes of the divine attributes are finite. But what reason could there be for God to possess a given magnitude to degree N rather than to degree N+1? More generally, how could a finite God be the kind of endpoint for explanation that cosmological arguments typically take God to be?
>
> If we are potential infinitists – i.e. if we reject all actual infinities, but allow that some entities and magnitudes are potentially infinite – then it seems that we will be obliged to say that God is potentially infinite, and that the magnitudes of the divine attributes are potentially infinite. But what kind of conception of God can sustain the claim that God is susceptible of improvement in various respects? If God possesses a magnitude to degree N even though God could possess that magnitude to degree N+1, surely God just isn't the kind of endpoint for explanation that cosmological arguments typically take God to be.
>
> If we are neither strict finitists nor potential infinitists, then it seems that we must be actual infinitists, i.e. we must suppose that God is actually infinite, and that the magnitudes of the divine attributes are actually infinite. But is there a conception of the infinite that can sustain the claim that God is actually infinite, and the claim that the magnitudes of the divine attributes are actually infinite without undermining the kinds

> of considerations to which orthodox cosmological arguments appeal in attempting to establish that God exists? Indeed, more generally, are there conceptions of the infinite that can sustain the claim that God is actually infinite, and the claim that the magnitudes of the divine attributes are actually infinite *tout court*? Moreover, if there is a conception of the infinite that can sustain the claim that God is actually infinite, can this conception of the infinite also sustain the idea of an incarnate God, and the idea that there is an afterlife in which people share the same abode as God?

As I noted at the end of the previous section, it seems to me that there are pressures that drive theologians in the direction of claiming that God possesses some properties to an unquantifiable – 'more than proper class many', '**On**' – extent. But, if that is right, then it seems that theologians should not look with any fondness on those philosophical views that deny that we can form a coherent conception of actually infinite domains and actually infinite magnitudes. Rather than side with formalists, or radical finitists, or constructivists, or intuitionists, or those who insist that there are none but merely potential infinities, believers in God should say instead that there can be domains and properties that are 'unquantifiably infinite', i.e. not measurable by any of the cardinalities that are to be found in Cantor's paradise. So, I take it, the direction of thought that is expressed in the first two paragraphs of the above quotation is acceptable without qualification (though there is much more to be said in defence of the main theses outlined therein). Furthermore – and for the same reasons – I take it that the line of thought that is expressed in the first part of the third paragraph is also acceptable.

However, when we turn to the question of traditional arguments for the existence of God, matters are rather more interesting than the above compressed presentation allows. What is true is that there are *some* traditional arguments for the existence of God – for example one *a priori* version of the kalām cosmological argument – in which it is explicitly assumed that there can be no actual infinities. *Those* arguments cannot be defended consistently with the adoption of the conception of divine infinity articulated in the previous section of this chapter. But, of course, there are many other arguments – including many other cosmological arguments – that make no such (implicit or explicit) assumption about the impossibility of actual infinities. *These* arguments are not impugned by the considerations about infinity to which I have been here adverting. (They may be impugned by *other* considerations about infinity; but that is another story.) It would be an interesting project to run an inventory of arguments about the existence of God, to determine where considerations

about infinity come up, to check to see how those arguments fare under the kinds of considerations that were adduced earlier.

When we turn to matters such as the idea of an incarnate God, and the idea that there is an afterlife in which people share the same abode as God, there is yet a further raft of considerations that comes into view. It is not easy to reconcile the suggestion that God is actually infinite with the idea that God took on a finite physical form. It is not easy to reconcile the idea that God's abode is infinite with the idea that that abode is inhabited by finite physical creatures (such as ourselves). At the very least, there is clearly an interesting possible project that investigates the ways in which particular Christian doctrines – concerning, for example, incarnation, trinity, atonement and so forth – are affected by particular theories about the ways and respects in which God is actually infinite. As I suggested at the outset, a full investigation of the implications for theology of an investigation of 'limits' and 'bounds' as a subject matter in its own right is likely to be very prolonged indeed.

2.2.8 A concluding stocktake

As I said initially, this chapter is intended to be a kind of prolegomenon to the discussion of infinity in theological contexts. What I have tried to do is to raise various kinds of issues in a preliminary way, without in any way supposing that my comments upon these issues constitute decisive verdicts. Perhaps it will be useful, in closing, to provide a summary of the range of issues that has been canvassed (and of the opinions that I have expressed).

First, there are issues that cluster around the question of the *normative significance* that mathematical and theological investigations of the infinite have for one another. On the one hand, it seems to me to be highly plausible to think that mathematical investigations of infinity do have significant consequences for theology that should be recognised on all sides. (Of course, this claim relies upon some contentious assertions about the properly realistic interpretation of theological talk. More about this later.) On the other hand, it seems to me to be equally plausible to suppose that *only* those who actually accept relevant theological presuppositions will suppose that theological investigations of infinity have significant implications for mathematics and the physical sciences. As I noted towards the end of section 1 above, there are no substantive results in contemporary logic or mathematics or physics that depend essentially upon theological assumptions: one is not *required* to make theological assumptions in order

to earn entitlement to the axiom of choice, or the fundamental theory of calculus, or the theory of general relativity, or whatever.[13]

Second, there are issues that cluster around the *interpretation* of theological talk. There is a long tradition of claiming that much – or even all – theological talk is metaphorical or analogical, or, at any rate, not susceptible of a straightforward realist construal. I have suggested that it is highly plausible to think that mathematical investigations of infinity will have significant consequences for theology only if theological talk is given a straightforwardly realist construal. At the very least, it is very hard to see how one could think that mathematical analyses of the infinite bear at all on theological talk about the infinite if this latter talk is all taken to be merely metaphorical, or analogical, or the like.

Third, there are issues that cluster around the *limits* that one might wish to impose upon straightforwardly realistic theological talk because of alleged limitations in our capacities to fully and completely understand the central objects of theological talk. I have suggested that it is not at all obvious that it is reasonable to allow that there are properties of God of which it is logically or metaphysically necessary that we have no more than a partial or incomplete grasp of what those properties *are*. However, if there are properties of God of which it is logically or metaphysically necessary that we have no more than a partial or incomplete grasp of what those properties *are*, then that suggests one kind of limitation upon the application of mathematical investigations of infinity in theological contexts that will need to be respected.

Fourth, there are issues that cluster around the *identification* of those parts of theology where it is plausible to suppose that mathematical investigations of infinity will have significant consequences. I take it that the obvious place to look is the discussion of divine attributes. There are many divine attributes that seem to involve some kind of imputation of infinite magnitude to properties or infinite domains of entities. While I mentioned a few plausible candidates – omniscience, omnipotence, omnipresence, eternity, perfect goodness, sole creation of the world *ex nihilo* – I don't pretend that this list is either systematically generated or exhaustive. However, it should not be supposed without further investigation that

[13] There have been some recent expressions of interest in, and support for, the notion of 'theistic science'. I take it that the key idea here is that there might be significant scientific – or logical, or mathematical – results that depend essentially upon theological assumptions. If, for example, the fine-tuning of the cosmological constants is best explained – and only explainable – by the hypothesis of intelligent design, then that explanation *might* count as an example of 'theistic science'. Thus, the claim that I have made in the main text is not entirely uncontroversial.

there are no other parts of theology – i.e. apart from discussion of the divine attributes (and, of course, the arguments for and against the existence God) – where mathematical investigations of infinity will have significant consequences.

Fifth, there are issues that cluster around the *application* of the results of mathematical investigations of infinity to those parts of theology where it is plausible that mathematical investigations of infinity will have significant consequences. How exactly can or do mathematical accounts of infinity contribute to the analysis, or understanding, or explanation of particular divine attributes (or of particular arguments concerning the existence of God)? What commitments to infinite magnitudes of properties or infinite domains of entities are plausibly incurred by way of the attribution of particular divine attributes (or the adoption of particular arguments concerning the existence of God)? What kinds of infinities are involved in those cases where there are commitments to infinite magnitudes of properties or infinite domains of objects incurred by way of the attribution of particular divine attributes (or the adoption of particular arguments about the existence of God)?

Sixth, there are issues that cluster around the *consistency* or stability of uses of the results of mathematical investigations of infinity in theology. Once we have in view a map of the ways in which the results of mathematical investigations of infinity have been – or could be – applied across a range of theological domains, we are then in a position to ask whether those results have been – or would be – applied in a consistent manner across those domains. I have suggested, for example, that there are serious questions to be asked about the consistency of the treatment of infinity in some of the standard arguments for the existence of God with the treatment of infinity in some of the standard analyses of the divine attributes.

Seventh, there are issues that cluster around the question of the *normative significance* that philosophical and theological investigations of the infinite have for one another. I take it that theological hypotheses can have significant consequences for philosophical debates about the ways (if any) in which infinity is present in the world. I sketched an argument which suggests that standard theological hypotheses bring with them a range of commitments to actual infinities and to Platonist interpretations of contested philosophical domains. If this is right, then, for example, the adoption of standard theological hypotheses has important consequences for the debates about formalism, finitism, intuitionism and Platonism in the philosophy of mathematics for those who take these theological hypotheses seriously.

Eighth, there are issues that cluster around the *application* of the results of mathematical investigations of infinity to specific parts of Christian theology and doctrine – for example, to discussions of trinity, incarnation, immortality and so forth. To the extent that there has been prior discussion of the *application* of the results of mathematical investigations of infinity to theology, this discussion has tended to focus on questions about generic divine attributes, i.e. divine attributes as these are conceived on most monotheistic conceptions of God. However, it seems to me that there are bound to be questions that are quite specific to Christian theology and doctrine for which investigation of 'limits' and 'bounds' as a subject matter in its own right has important consequences.[14]

While the examination of infinity in theological contexts is doubtless not itself an *infinite* task, it is abundantly clear – even from this relatively superficial and incomplete overview – that there is *plenty* of work to be done.

[14] Perhaps because of the nature of my own interests, I have focused here particularly upon considerations from logic, philosophy of language and metaphysics. But there are also interesting *epistemological* issues that are raised by questions about the infinite – for some introduction to these considerations, see, for example, Thomson (1967) and Lavine (1994) – and, in particular, by questions about the infinite in the context of theology.

CHAPTER 3

Perfection

There are various characterisations of monotheistic gods that make use of the concept of 'perfection', or of concepts that are plausibly said to be cognate with the concept of 'perfection'. According to some writers, there is a monotheistic god who is 'that than which no greater can be conceived'. According to other writers, there is a monotheistic god who is 'the perfect being', or perhaps 'the most perfect being', or the like. According to yet other writers, there is a monotheistic god who is 'the greatest possible being'.

Each of these different characterisations of a monotheistic god carries with it some explicit or implicit suggestion that the being in question is perfect. However, as we shall see, there are many different ways in which the notion of 'perfection' that is invoked here might be understood. Moreover, there are different ways in which the claim that there is a perfect being can be understood.

3.1 Conceptions of perfection

Suppose that we take Anselmian theism to consist in the following two claims: (1) there is a being than which none greater can be conceived; and (2) it is knowable on purely – solely, entirely – *a priori* grounds that there is a being than which none greater can be conceived. A key question in the assessment of Anselmian theism concerns the interpretation of the expression 'being than which none greater can be conceived'. In particular, a question that is suggested by some of the recent literature on this topic is whether we should interpret this expression in terms of perfect – *ideal* – excellence, or whether we should interpret it in terms of maximal – *maximal possible* – excellence.

In this chapter, I set out to examine the notions of particular excellence, overall excellence, perfect excellence and maximal excellence. I argue that when we get clear about these notions, we see that Anselmian theism gains

traction by conflating notions that ought to be carefully distinguished; and we also see that there are grounds for thinking that a careful separation of notions that ought to be distinguished casts serious doubt on claim (b), i.e. on the second of the two claims that is constitutive of Anselmian theism.

The final section of this chapter is an appendix in which I examine the recent defence of Anselmian theism in Nagasawa (2008). Here I argue that Nagasawa's defence of Anselmian theism is undermined by the conflation identified in the main body of this chapter.

3.1.1 Excellences and excellence

We begin our investigation with consideration of the following assumption:

> *Excellence Assumption*: One property of a thing is its overall excellence. The overall excellence of a thing depends upon further properties of that thing: its particular excellences. The overall excellence of a thing is determined by whether or not it possesses – and, at least in some cases, the extent to which it possesses – particular excellences.

The Excellence Assumption is controversial. Some – for example, non-cognitivists and error-theorists – deny that there are excellences, i.e. they deny that there are properties of things that correspond to some or all of our evaluative terms. Others – even amongst those who accept that there are properties of things that correspond to at least some of our evaluative terms – deny that there is a property of a thing that is its overall excellence. Perhaps there are yet others – even among those who accept that there are properties of things that correspond to at least some of our evaluative terms, and who also accept that the overall excellence of a thing features among the properties of that thing – who deny that the overall excellence of a thing is determined by the particular excellences that are possessed by that thing.

Here I take no stand on the acceptability of the Excellence Assumption; I am merely interested in exploring possible consequences of its acceptance. However, in the final sections of this chapter I will return to consider some of the implications of the evidently controversial nature of the Excellence Assumption.

3.1.2 Orderings

If we suppose that excellences are properties of things, then we can also suppose that it is possible to compare possible objects in respect of their possession of particular excellences. If a particular excellence is an

all-or-nothing matter, then that excellence partitions possible objects into two disjoint collections: the possible objects that possess the excellence, and the possible objects that fail to possess the excellence. (We ignore complications that might arise from considerations of vagueness, and the like.) But if a particular excellence is not an all-or-nothing matter, then there will be at least some pairs of possible objects for which it is true that one of the possible objects in the pair exceeds or surpasses the other possible object in that pair for that particular excellence.

Cases in which a particular excellence *e* is not an all-or-nothing matter divide into two types. On the one hand, it might be that *e* imposes a total ordering on possible objects: it might be that, for any pair of possible objects o_1 and o_2, either (1) o_1 exceeds or surpasses o_2 in respect of *e*; or (2) o_2 exceeds or surpasses o_1 in respect of *e*; or (3) o_1 and o_2 are equal in respect of *e*. On the other hand, it might be that *e* merely imposes a partial ordering on possible objects: it might be that there are some pairs of possible objects for which none of (1), (2) and (3) is true. If *e* merely imposes a partial ordering on possible objects, then there are pairs of possible objects that are not ranked in respect of *e*.

According to the Excellence Assumption, the overall excellence of a possible object is determined by its particular excellences. It seems plausible to think that if some particular excellences merely impose a partial ordering on possible objects, then overall excellence will also only impose a partial ordering on possible objects. (If necessary, we can stipulate that something counts as an excellence only if it can make a difference to overall excellence. If a particular excellence *e* that only imposes a partial ordering on possible objects can make a difference to overall excellence, and if possible objects o_1 and o_2 can be equal in overall excellence apart from consideration of *e*, then o_1 and o_2 can fail to be ranked in respect of overall excellence. More generally, if possible objects o_1 and o_2 can be equal in respect of all particular excellences in which they are ranked, and there can be excellences on which o_1 and o_2 are not ranked, then it seems clear that o_1 and o_2 will not be ranked in respect of overall excellence.) However, even if all excellences are total orderings, it might still be that overall excellence is merely partially ordered: whether or not this is so depends upon the details of the determination of overall excellence by particular excellences.

3.1.3 Scales

If a particular excellence *e* imposes a total ordering on possible objects, then we can suppose that *e* generates a *scale* for objects. There are various

different kinds of scales that might be supposed to apply to particular excellences.

(1) A scale for a particular excellence might be discrete, or dense, or continuous.
(2) A scale for a particular excellence might be bounded or unbounded.
(3) A scale for a particular excellence might have one dimension, or it might have more than one dimension.
(4) A scale for a particular excellence might have a finite analysis, or it might fail to have a finite analysis.

If a particular excellence *e* is an all-or-nothing matter along a given dimension, then we can take the set {0, 1} – or, perhaps, in some cases, the set {–1, 1} – to be an adequate representation of an appropriate scale for *e* along that dimension.

If a particular excellence *e* is not an all-or-nothing matter along a given dimension, and if *e* partitions possible objects into finitely many equivalence classes, then we can take a set {0, 1, …, N} – or, perhaps, in some cases, a set {–N, …, N} – to be an adequate representation of an appropriate scale for *e* along that dimension.

If a particular excellence *e* is not an all-or-nothing matter along a given dimension, and if *e* partitions possible objects into infinitely many equivalence classes that collectively have the ordinal features of the non-negative integers – or, perhaps, in some cases, the integers – then we can take N – or, if there are those other cases, J – to be an adequate representation of an appropriate scale for *e* along that dimension.

If a particular excellence *e* is not an all-or-nothing matter along a given dimension, and if *e* partitions possible objects into infinitely many equivalence classes that collectively have the ordinal features of the non-negative real numbers, then we can take either the real interval [0, 1] – or (0, 1], or [0, 1), or (0, 1) – or the real interval [0, ∞) – or (0, ∞) – to be an adequate representation of an appropriate scale for *e*, depending upon whether the scale is bounded or unbounded. (And if there are cases in which *e* partitions possible objects into infinitely many equivalence classes that collectively have the ordinal features of the real numbers, then we can take the real interval [–1, 1] – or [–1,1), or (–1,1], or (–1,1) – or the real interval (–∞, ∞) – to be an adequate representation of an appropriate scale for *e*.)

If a particular excellence *e* has a scale with more than one dimension, then it might be that we need different kinds of representations for these different dimensions. If every excellence has a scale, and if there is a scale for overall excellence, then we might be able to think of the scales for individual excellences as dimensions of the scale for overall excellence.

Knowledgeability might be taken to be a scale with more than one dimension in the following way. Suppose that there are two kinds of propositions: (1) propositions that are *knowable by finite intellect*; and (2) propositions that are *knowable only by infinite intellect*. Each of these two kinds of propositions might be taken to generate a scale with finite analysis for a dimension of knowledgeability: the percentage of true propositions of the given kind that are known. Finally, the overall scale for knowledgeability might be subject to the following further condition: any non-zero amount of knowledge of propositions knowable only by infinite intellect trumps any amount of knowledge of propositions knowable by finite intellect. (Of course, I make no commitment to the correctness, or even the intelligibility, of this proposed scale for knowledge. I introduce it merely to illustrate what I mean by dimensions of scales, and by finite analysis for a scale.)

3.1.4 Absolute degrees of excellence

Suppose that overall excellence has a total ordering, i.e. suppose that overall excellence – along with each particular excellence – has a total ordering on a degreed scale. Then it is at least *prima facie* plausible to suppose that we can describe overall excellence and particular excellences in the following way:

An agent x in a world w at time t relative to domain S possesses excellence e to degree *e (x, w, S, t)*.

An agent x in world w at time t possesses excellence e to degree *e (x, w, t)* = $\int_S$ e (x, w, S, t), where $\int_S$ is a function that 'averages' the excellence of x in w at t over all of the domains that are relevant to the excellence e.

An agent x in world w possesses excellence e to degree *e (x, w)* = $\int_t$ e (x, w, t), where $\int_t$ is a function that 'averages' the excellence of x in w over all of the times in w at which x exists in w.

An agent x possesses excellence e to degree *e (x)* = $\int_w$ e (x, w), where $\int_w$ is a function that 'averages' the excellence of x in w over all of the worlds in which x exists. (An alternative definition would have it that an agent x has excellence **e (x)** = $\int_w$ e (x, w), where $\int_w$ is a function that 'averages' the excellence of x over all worlds, and where e (x, w) = 0 if x does not exist in w. We shall return to consideration of the merits of this alternative definition in section 3.1.9.)

An agent x in world w at time t has overall excellence *E (x, w, t)* = $\int_e$ e (x, w, t), where $\int_e$ is a function that 'averages' over the excellences that x has in w at t.

An agent x in world w has overall excellence *E (x, w)* = $\int_t$ E (x, w, t), where $\int_t$ is a function that 'averages' the overall excellence of x in w over all of the times in w at which x exists in w.

An agent x has overall excellence *E (x)* = $\int_w$ E (x, w), where $\int_w$ is a function that 'averages' the overall excellence of x over all of the worlds in which x exists. (Again, an alternative definition would have it that an agent x has overall excellence *E (x)* = $\int_w$ E (x, w), where $\int_w$ is a function that 'averages' the overall excellence of x over all worlds, and where E(x, w) = 0 if x does not exist in w.)

It is not plausible to suppose that E (x) is non-degreed. Nor is it plausible to suppose that E (x) is discrete. It is plausible to suppose that the scale for E(x) has a finite analysis only if there is one possible object that 'sets the standard' for each of the particular excellences (hence only if the scale for each of the particular excellences is bounded). It is plausible to suppose that the scale for E(x) is bounded but lacking a finite analysis only if the space of possibilities satisfies very special conditions. (More on this in section 3.1.9 below.) Hence, if it is not plausible to suppose that there is one possible object that 'sets the standard' for each of the particular excellences, and if it is not plausible to suppose that the space of possibilities satisfies very special conditions, then it is plausible to suppose that the scale for E(x) is unbounded.

3.1.5 Comparative degrees of excellence

Suppose that overall excellence – along with at least some particular excellences – has a merely partial ordering. Then it is at least *prima facie* plausible that we should begin our investigation with definitions of the following kind:

M (x, S, w, t, y, S', w', t', e) iff x is more excellent on domain S in world w at time t than y is on domain S' in world w' at t' with respect to particular excellence e.

L (x, S, w, t, y, S', w', t', e) iff x is no less excellent on domain S in world w at time t than y is on domain S' in world w' at t' with respect to particular excellence e.

On the assumption that we can somehow 'average out' domain specificity and time-dependence from the defined relations, we will be able to produce defined relations of the following kinds:

M (x, w, y', w', e) iff x is more excellent in world w than y is in world w' with respect to particular excellence e.

L (x, w, y, w', e) iff x is no less excellent in world w than y is in world w' with respect to particular excellence e.

On the further assumption that we can somehow 'average out' world-specificity from the defined relations, we will then be able to produce defined relations of the following kinds:

M (x, y, e) iff x is more excellent than y with respect to particular excellence e.
L (x, y, e) iff x is no less excellent than y with respect to particular excellence e.

Finally, on the further assumption that we can somehow 'average out' the relativity to particular excellences, we will be able to produce defined relations of the following kinds:

M (x, w, t, y, w', t') iff x is more overall excellent in world w at time t than y is in world w' at t'.
L (x, w, t, y, w', t') iff x is no less overall excellent in world w at time t than y is in world w' at t'.
M (x, w, y', w') iff x is more overall excellent in world w than y is in world w'.
L (x, w, y, w') iff x is no less overall excellent in world w than y is in world w'.
M (x, y) iff x is more overall excellent than y.
L (x, y) iff x is no less overall excellent than y.

There is reason to suppose that we can make *some* judgements of the forms M (x, S, w, t, y, S', w', t', e) and L (x, S, w, t, y, S', w', t', e). In particular, for any excellence e, if S'⊆S, and x in w at t *dominates* y in w' at t' (with respect to e on S), then it will be true that M (x, S, w, t, y, S', w', t', e) and L (x, S, w, t, y, S', w', t', e). Moreover, there are some cases in which we clearly can 'average out' relations in the way required: namely, those cases in which there is *point-by-point dominance* of one object over another. Suppose, for example, that, for all S, M (x, S, w, t, y, S, w', t', e) and L (x, S, w, t, y, S, w', t', e). Then, clearly, M (x, w, t, y, w', t') and L (x, w, t, y, w', t'). Similarly, if for all t, M (x, w, t, y, w', t) and L (x, w, t, y, w', t), then clearly M (x, w, y, w'). And if for all w, M (x, w, y, w) and L (x, w, y, w), then M (x, y) and L (x, y). However, these are clearly special cases that *may not* turn out to be of any particular interest.

3.1.6 Perfections and perfection

Perfections are *ideals* for excellences. Perfections are also the bases for finite analyses in the case of absolutely degreed excellences that have finite analyses. It is not a requirement on perfections that they are possibly instantiated: a perfection can be an ideal for an excellence even if it is an ideal that cannot possibly be realised.

Consider knowledgeability. It might be thought that it is an ideal for knowledgeability that there is nothing that one fails to know: one is perfectly knowledgeable only if one knows 100 per cent of true propositions. Moreover, the idea that perfect knowledgeability requires knowledge of 100 per cent of true propositions is obviously tied to a finite analysis of knowledgeability: the knowledgeability of a given being in a given world at a given time on a given domain is measured by the percentage of true propositions from that domain that the being in question knows at the time in question in the world in question. However, it might also be thought that this is an unrealisable ideal: it might be thought that it is simply impossible for there to be a being that knows 100 per cent of true propositions.

Consider powerfulness. It might be thought that it is an ideal for powerfulness that there is nothing that one is unable to do: one is perfectly powerful only if one can do 100 per cent of tasks that it is possible for at least one agent to do. Moreover, the idea that perfect powerfulness requires the ability to perform 100 per cent of tasks that it is possible for at least one agent to do is obviously tied to a finite analysis of powerfulness: the powerfulness of a given being in a given world at a given time on a given domain is measured by the percentage of tasks that it is possible for at least one agent to perform on the domain in question that the being in question can perform in the world in question at the time in question on the domain. However, it might also be thought that this is an unrealisable ideal: it might be thought that it is simply impossible for there to be a being that is able to perform 100 per cent of tasks that it is possible for at least one being to perform.

And so on. If we suppose that, for every excellence, there is a perfection that is an ideal for that excellence, then we might also suppose that there is a perfection for overall excellence: a perfect being is one that is perfect with respect to every excellence. That is: an ideal for a being is that, for each excellence, that being is perfect with respect to that excellence: perfectly knowledgeable, perfectly powerful, perfectly good and

so forth. Of course, if it is impossible for particular perfections to be realised, then it is impossible for there to be a being that realises perfection; but, even if there is no particular perfection that it is impossible to realise, it may still be the case that it is impossible for there to be a being that realises perfection. Moreover, our further judgements about the realisability of particular perfections, and of the possibility of a being that exhibits all perfections, depend upon our judgements about the space of possibilities.

3.1.7 Near-perfections and near-perfection

Near-perfections are *minimal* departures from perfections, i.e. minimal departures from ideals of excellence. We can illustrate the notion of near-perfection using the same examples that were introduced in the previous section.

Consider knowledgeability. Given that it is an ideal for knowledge that there is nothing that one does not know, a minimal departure from ideal knowledge is a case in which there is just one proposition that one does not know (and, by sympathetic extension, minimal departures from ideal knowledge are cases in which there are just a handful of propositions that one does not know). It is worth noting that, if perfect knowledge is unrealisable, then it may well be the case that near-perfect knowledge is also unrealisable: if there cannot be a being that knows 100 per cent of true propositions, then it may also be the case that there cannot be a being that fails to know 100 per cent of true propositions because there is just one proposition – or a tiny handful of propositions – that it fails to know.

Consider powerfulness. Given that it is an ideal for powerfulness that one can do anything that it is possible for at least one being to do, a minimal departure from ideal powerfulness is a case in which there is just one thing that it is possible for at least one being to do that one cannot do (and, by sympathetic extension, minimal departures from ideal powerfulness are cases in which there are just a handful of things that it is possible for at least one being to do that one cannot do). Again, it is worth noting that if perfect powerfulness is unrealisable, then it may well be the case that near-perfect powerfulness is also unrealisable: if there cannot be a being that is able to do 100 per cent of the things that it is possible for at least one being to do, then it may also be the case that there cannot be a being that fails to be able to do 100 per cent of the things that it is possible for at least one being to do because there is just one thing – or a

tiny handful of things – that it is possible for other beings to do that it is unable to do.

And so on. Of course, given the notion of near-perfections, we can also introduce the notion of a near-perfect being, i.e. of a being that is perfect in every respect but one, and near-perfect in that remaining respect (or, more generously, of a being that is perfect in all but a handful of respects, and near-perfect in all of those remaining respects). As before, we note that, even if all of the relevant perfections and near-perfections are realisable, it may still be the case that near-perfection is unrealisable.

3.1.8 Maximality and near-maximality

Maximal excellences are *maximal possible* instantiations of excellences. If an excellence *e* has a total order, then a possible object x is maximally excellent in respect of *e* just in case the degree to which x possesses *e* is not exceeded by the degree to which any other possible object possesses *e*: $(\forall y)\ (e(x) \geq e(y))$. If an excellence *e* has a merely partial order, then a possible object x is maximally excellent in respect of *e* just in case there is no possible object y such that y exceeds x in excellence with respect to *e*: $(\forall y)$ L (x, y, e). Of course, these definitions leave open the possibility that there is exactly one possible being that is maximally excellent in respect of e, and they also leave open the possibility that there is more than one possible being that is maximally excellent in respect of e.

There are corresponding definitions of what it is for a possible being to be maximal with respect to overall excellence E. If overall excellence is totally ordered, then a possible object has maximal overall excellence just in case the degree to which x is overall excellent is not exceeded by the degree to which any other possible object is overall excellent: $(\forall y)\ (E(x) \geq E(y))$. And if overall excellence is merely partially ordered, then a possible object x has maximal overall excellence just in case there is no possible object y such that y exceeds x in respect of overall excellence: $(\forall y)$ L (x, y). Again, these definitions leave open the possibility that there is exactly one possible being that has maximal overall excellence, and they also leave open the possibility that there is more than one possible being that has maximal overall excellence.

We can illustrate the ways in which maximal excellences may differ from perfections and near-perfections by considering the same examples that were discussed in the previous two sections.

Consider knowledgeability. Suppose that it turns out that it is impossible for any being to know more than 2 per cent of all true propositions.

(In section 3.1.11 we shall consider a theory of possibilities that might well vindicate this claim.) If it is impossible for any being to know more than 2 per cent of all true propositions, then it is clear that maximal knowledgeability falls very far short of both perfect knowledgeability and near-perfect knowledgeability.

Consider powerfulness. Suppose that it turns out that it is impossible for any being to perform more than 2 per cent of the tasks that it is possible for at least one being to perform. (Again, in section 3.1.11 we shall consider a theory of possibilities that might be supposed to vindicate this claim.) If it is impossible for any being to perform more than 2 per cent of the tasks that it is possible for at least one being to perform, then it is clear that maximal powerfulness falls very far short of both perfect powerfulness and near-perfect powerfulness.

And so on. If we suppose that, for every excellence, there is a corresponding maximal excellence, then we might suppose that there is also maximal overall excellence. However, if there are some excellences for which there is no corresponding maximal excellence, then it seems plausible to suppose that there is no maximal overall excellence. Of course, even if we suppose that, for every excellence, there is a corresponding maximal excellence, we might still suppose that there is no corresponding maximal excellence (depending on our further judgements about the space of possibilities).

There are at least three different ways in which we might deny that there is a maximal excellence that corresponds to a given excellence. Suppose, first, that an excellence *e* has a total order. On the one hand, it might be that the scale for e is unbounded. In that case, there is no upper limit to possibly instantiated degrees of e. On the other hand, it might be that the scale for e is bounded, but that the uppermost value on the scale is not possibly instantiated. In that case, while there is an upper limit to possibly instantiated degrees of e, there is no possible object that instantiates that upper limit. (This case is only possible if our scale is dense or continuous.) Suppose, second, that an excellence e has a merely partial order. In that case, it might be that, for any possible object x, there is a possible object y such that M (y, x, e), i.e. such that y exceeds or surpasses x in respect of e. (Of course, this condition is also satisfied in each of the cases in which a totally ordered excellence fails to have a corresponding maximal excellence.)

3.1.9 Existence, necessity and essence

Among the controversial features of the discussion to this point, one obvious point of possible contention lies in the way that we have treated

modal considerations. The assumption that one can evaluate the excellence of possible objects by summing over the excellence of those objects in possible worlds is clearly controversial. There may be *something* to the intuition that excellence is – or ought to be – independent of the vagaries of history, but, at the very least, it is not obvious that we should erect our account of excellence on this foundation. Moreover, even if it is true that our 'alternative' account – viz. that an agent x has excellence **E (x)** = $\int_w$ E (x, w), where $\int_w$ is a function that 'averages' the excellence of x over all worlds, and where E (x, w) = 0 if x does not exist in w – gives results that agree with the intuitions of those who suppose that necessary existence is an excellence, and that essential excellence has more value than non-essential excellence, it might nonetheless be thought that we should take relative excellence in worlds as primitive, and then work explicitly with modal operators (or with equivalent quantification over possible worlds).

A first thought is that a being is *maximally excellent in the actual world* just in case that being exists in the actual world and satisfies the following two conditions: first, it is no less excellent than any other being in the actual world; and second, it is not less excellent than any being in any other possible world. That is:

G is maximally excellent in the actual world iff (1) (∀y) L (G, α, y, α) and (2) (∀w) (∀y∈ w) L (G, α, w, y). (The first condition is redundant given the second condition; I include it to enable straightforward comparison with the following claim.)

G is *uniquely* maximally excellent in the actual world iff (1) (∀y≠G) M (G, α, y, α) and (2) (∀w) (∀y∈ w) L (G, α, w, y).

A second thought is that a being is *resiliently maximally excellent in the actual world* just in case that being exists in all worlds that are sufficiently close to the actual world and satisfies the following two conditions: first, in each world that is sufficiently close to the actual world, the being is no less excellent than any other being in that world; and second, the being is not less excellent than any being in any other possible world. That is:

G is resiliently maximally excellent in the actual world iff (1) (∀w: w is sufficiently near to α) (∀y∈ w) L (G, w, y, w); and (2) (∀w) (∀y∈ w) L (G, α, w, y). (Perhaps one might also want to insist that condition (2) holds in all worlds sufficiently close to the actual world: (2)' (∀w': w' is sufficiently close to the actual world) (∀w) (∀y∈ w) L (G, w', w, y).)

G is *uniquely* resiliently maximally excellent in the actual world iff (1) (∀w: w is sufficiently near to α) (∀y≠G∈ w) L (G, w, y, w); and (2) (∀w) (∀y∈ w) L (G, α, w, y). (Here, one might want to weaken condition (1) to allow that G is uniquely maximally excellent in the actual world, and perhaps only no less than maximally excellent in some sufficiently nearby worlds; and one might want to insist that condition (2) holds in all worlds sufficiently close to the actual world. Since these two variations are independent, that gives four alternatives to the formulated principle.)

A third thought is that a being is *necessarily maximally excellent (in the actual world and in all possible worlds)* just in case that being exists in all possible worlds and in each of those possible worlds is at least as excellent as all possible beings in all possible worlds. That is:

G is necessarily maximally excellent iff (∀w) (∀w') (∀y∈ w') L (G, w, y, w').
G is *uniquely* necessarily maximally excellent iff (∀w) (∀w') (∀y≠G∈ w') M (G, w, y, w').

Of course, there are corresponding definitions for particular excellences – as against overall excellence – that I do not need to set out explicitly here.

3.1.10 Theories of possibility

As noted in Oppy (2006a: 153f.), there is great diversity in philosophical views about the metaphysics and epistemology of modality. Some philosophers repudiate all talk about necessity, possibility, essence and the like; other philosophers repudiate all *de re* modal talk about necessity, possibility, essence and the like. Among those philosophers who do not repudiate all modal talk (or all *de re* modal talk), some hold that modal talk is merely of instrumental value: it does not serve to limn the structure of reality. Those who take *eliminativist* (error-theoretic) or *instrumentalist* (non-cognitivist) approaches to modal talk will not look favourably on the analyses presented in earlier sections of this chapter.

Among philosophers who do not accept eliminativist or instrumentalist approaches to modal talk, there is considerable diversity of opinion concerning the truth-makers for modal talk. Some endorse *primitivist* accounts according to which there are no truth-makers for modal claims. Some endorse *conceptualist* accounts according to which the truth-makers for modal claims are mental states of actual human agents, or mental states

of other actually existing agents. Some endorse *realist* accounts, according to which the truth-makers for modal claims are a particular domain of entities: concrete possible worlds, or ersatz possible worlds, or the like. We take no stance on this divided opinion here: however, we allow ourselves to talk as the realists do.

Some philosophers suppose that there are different kinds of possibilities – logical possibilities, conceptual possibilities, metaphysical possibilities, physical possibilities, epistemic possibilities, doxastic possibilities and so forth – that are realised in different kinds of possible worlds – logically possible worlds, conceptually possible worlds, metaphysically possible worlds, physically possibly worlds, epistemically possible worlds, doxastically possible worlds and so on. Other philosophers suppose that, to the extent that these really are different kinds of possibilities, they are all realised in the same kinds of possible worlds (though perhaps only in restricted parts of the total domain of possible worlds). On this kind of view, there are inclusion relations that hold between kinds of possible worlds: for instance, all physically possible worlds are metaphysically possible worlds; all metaphysically possible worlds are conceptually possible worlds; and so forth. Yet other philosophers deny at least some of the alleged distinctions between different kinds of possibilities: some hold that 'epistemic possibilities' and 'doxastic possibilities' are not really kinds of possibilities; others hold there is no distinction between, say, metaphysical possibility and physical possibility. Again, I take no stance on this divided opinion here: however, I do allow myself to proceed with talk about 'metaphysical' possibility.

In the next section, we shall examine the implications of *one* particular theory of possibility for the preceding account of maximal beings. While I think that this theory is an attractive account of metaphysical possibility, I have no interest in urging its attractions here. Rather, the point is just to show what *might* be entailed by the account of maximal beings when that account is embedded in a particular theory of possibility.

3.1.11 Worked example

Here is the promised theory of (metaphysical) possibility:

(1) All possible worlds share a common history with the actual world, and diverge from it only as the result of a different outcome for an objectively chancy event.

(2) Our world has always been a purely natural world: there have been no spooks, no gods, etc. at any point in its history.
(3) Nothing supernatural arises in hitherto purely natural worlds.
(4) Physical laws and basic physical structures do not vary over history.

Given (1)–(4), contemporary physics makes it very plausible to think that maximally knowledgeable beings are very far from perfectly knowledgeable beings, and very far from near-perfectly knowledgeable beings; and that maximally powerful beings are very far from perfectly powerful beings, and very far from near-perfectly powerful beings. For, given (1)–(4), contemporary physics makes it very plausible to suppose that no possible being can have knowledge of more than its relatively immediate physical surroundings – since no possible being can have knowledge of particular physical conditions outside of its backward light cone – and that no possible being can act on anything more than its relatively immediate physical surroundings – since no possible being can act in physical arenas that lie outside of its forward light cone. And, moreover, given (1)–(4), contemporary physics makes it very plausible to suppose that most of the physical world lies outside of both the forward and backward light cones of *any* possible being.

It is perhaps worth noting that we can probably get the same kinds of results even if we relax the final condition in our theory of possibility: even if we countenance worlds with different values for physical constants and boundary conditions, and worlds in which there are (not too) different physical laws, it will still be the case that even maximally knowledgeable beings are very far from perfectly knowledgeable beings, and very far from near-perfectly knowledgeable beings; and that even maximally powerful beings are very far from perfectly powerful beings, and very far from near-perfectly powerful beings. The theory of metaphysical possibility sketched above is not the only theory of metaphysical possibility that will deliver the consequences that I have noted.

Perhaps it is also worth noting that at least some of the claims that I have made in this section have not gone uncontested. In particular, Tipler (1994) claims that even if our world consists of no more than the physical universe as described by current physical theory, it may still be the case that there is a maximally knowledgeable being that knows 100 per cent of the propositions that are true of the physical universe. I think that Tipler's views are extremely far-fetched; in any case, I do not propose to consider them further here. (I provide further discussion of Tipler's views in Oppy (1998) and Oppy (2000).)

3.1.12 Anselmian theism

Anselmian theism is typically said to be characterised by the claim that there is a unique being than which no greater can be conceived, or by the claim that there is a unique being than which no greater can be thought.

In the light of the foregoing discussion, we can see that there are at least two importantly different ways in which what is said to be the characteristic claim of Anselmian theism can be interpreted. On the one hand, the allegedly characteristic claim of Anselmian theism might be the claim that there is a unique *perfect* being: a being that is perfect with respect to every excellence. On the other hand, the allegedly characteristic claim of Anselmian theism might be the claim that there is a unique *maximal* being: a being that is maximal with respect to every excellence. And, of course, even if they are less plausible as interpretations of what is said to be the characteristic claim of Anselmian theism there are also many intermediate interpretations that might also be considered, for example the claim that there is a unique *nearly perfect* being.

Whether one thinks that any importance attaches to this distinction between two different ways in which what is said to be the characteristic claim of Anselmian theism can be interpreted *might* be thought to depend upon whether or not one supposes that Anselmian theism is true. If Anselmian theism is true, then, we might suppose, there is a single being that is both perfect with respect to every excellence and maximal with respect to every excellence. For, on the one hand, if Anselmian theism is true, then God's excellence in respect e just is the standard (or ideal) against which the excellence in respect e of every other possible being is measured. And, on the other hand, if Anselmian theism is true, then God's excellence in respect e is the maximum possible excellence in respect e. That is, we might suppose, if Anselmian theism is true, then God is both a perfect being and a maximally excellent being. However, if Anselmian theism is false, then, we might suppose, even if there is a being that is uniquely maximally excellent, there is surely no single being that is perfect with respect to every excellence. In particular, if Anselmian theism is false, then at least some of the diverse ideals for different excellences are surely impossible to instantiate.

The argument of the previous paragraph may appear tempting; but I doubt that it is correct. In particular, if we suppose that Anselmian theism implies some kind of commitment to the success of Anselmian ontological arguments, then it seems to me that proponents of Anselmian theism are required to think about how Anselmian ontological arguments fare under the various possible disambiguations of the key phrase that figures in those

arguments. If we suppose that commitment to the success of Anselmian ontological arguments implies commitment to the idea that those not already committed to Anselmian theism ought to be persuaded of the truth of Anselmian theism by those arguments, then it is clear that those arguments cannot rest on the assumption that a perfect being is a maximally excellent being *if* that assumption in turn must be founded in the assumption of the truth of Anselmian theism. On the other hand, if we suppose that commitment to the success of Anselmian ontological arguments implies commitment to the idea that ontological arguments somehow display adequate epistemic or doxastic foundations for Anselmian theism, then, again, it is clear that those arguments cannot rest on the assumption that a perfect being is a maximally excellent being *if* that assumption in turn must be founded in the assumption of the truth of Anselmian theism.

In the next three sections of this chapter we will ask how Anselmian theism fares under each of three possible disambiguations of what is typically said to be the characteristic claim of Anselmian theism.

3.1.13 A perfect being?

Suppose that we take Anselmian theism to be grounded in the claim that there is a perfect being, i.e. a being that is perfect with respect to every excellence. What reasons might one have for refusing to accept this claim, i.e. what reasons might one have for refusing to believe that there is such a perfect being?

(1) One might reject the Excellence Assumption. That is, one might be a non-cognitivist or an error-theorist about at least some excellences; or one might deny that there is a property of overall excellence; or one might deny that the overall excellence of a thing is determined by its particular excellences.
(2) One might reject the claim that all excellences have finite analyses, or the claim that overall excellence has a finite analysis. In other words, one might reject the claim that, for each excellence, there is an 'external' standard against which the excellence of particular objects is measured; or one might reject the claim that, for overall excellence, there is an 'external' standard against which the overall excellence of particular objects is measured.
(3) One might suppose that it is highly likely that the scales for some excellences are unbounded, or that scale for overall excellence is unbounded. Further, one might suppose that it is highly likely that

the scales for some excellences, while bounded by an ideal, are such that it is impossible for the bound to be instantiated, even though it is possible for the bound to be arbitrarily closely approached. And one might suppose that it is highly likely that the scales from some excellences, while bounded, are not bounded by ideals (and this whether or not it is possible for those bounds to be instantiated).

(4) One might hold a theory of possibility according to which it is simply *impossible* for at least some excellences to be perfectly instantiated; or one might hold a theory of possibility according to which it is simply impossible for at least some excellences to be jointly perfectly instantiated; or one might hold a theory of possibility according to which it is simply impossible for at least some excellences to be jointly perfectly instantiated given that certain other facts obtain. Such a theory of possibility might not need to be very demanding: there are well-known worries about the possibility of beings with knowledge of 100 per cent of true propositions; and there are well-known worries about the possibility of beings with power to perform 100 per cent of tasks that it is possible for at least one being to perform that also are incapable of performing tasks that are less than 100 per cent good; and there are well-known worries about the possibility of beings with knowledge of 100 per cent of true propositions, and power to perform 100 per cent of tasks that it is possible for at least one being to perform, and inability to perform actions that are less than 100 per cent good existing in worlds that exhibit the degrees and kinds of evils that are to be found in the actual world. However, *given* sufficiently demanding theories of possibility, it is clear that these worries will not be controversial.

Given this sample of possible objections to the perfect being interpretation of Anselmian theism, it is clear that there are formidable barriers to the idea that there are *persuasive* Anselmian ontological arguments; and it also seems plausible to suggest that there are formidable objections to the idea that there are good *a priori* grounds for acceptance of the claim that there is instantiation of the characteristic formula of Anselmian theism.

3.1.14 A nearly perfect being?

Suppose that we take Anselmian theism to be grounded in the claim that there is a nearly perfect being, i.e. a being that is at least nearly perfect with

respect to every excellence. What reasons might one have for refusing to accept this claim, i.e. what reasons might one have for refusing to believe that there is such a nearly perfect being?

(1) One might reject the Excellence Assumption. That is, one might be a non-cognitivist or an error-theorist about excellences; or one might deny that there is a property of overall excellence; or one might deny that the overall excellence of a thing is determined by its particular excellences.

(2) One might reject the claim that all excellences have finite analyses, or the claim that overall excellence has a finite analysis. In other words, one might reject the claim that, for each excellence, there is an external standard against which the excellence of particular objects is measured; or one might reject the claim that, for overall excellence, there is an external standard against which the overall excellence of particular objects is measured.

(3) One might suppose that it is highly likely that the scales for some excellences are unbounded, or that scale for overall excellence is unbounded. Further, one might suppose that it is highly likely that the scales from some excellences, while bounded, are not bounded by near-ideals (and this whether or not it is possible for those bounds to be instantiated).

(4) One might hold a theory of possibility according to which it is simply *impossible* for at least some excellences to be near-perfectly instantiated; or one might hold a theory of possibility according to which it is simply impossible for at least some excellences to be jointly near-perfectly instantiated; or one might hold a theory of possibility according to which it is simply impossible for at least some excellences to be jointly near-perfectly instantiated given that certain other facts obtain. Such a theory of possibility might not need to be very demanding: there are well-known worries about the possibility of beings with knowledge of near to 100 per cent of true propositions; and there are well-known worries about the possibility of beings with power to perform near to 100 per cent of tasks that it is possible for at least one being to perform that also are incapable of performing tasks that are less than near to 100 per cent good; and there are well-known worries about the possibility of beings with knowledge of near to 100 per cent of true propositions, and power to perform near to 100 per cent of tasks that it is possible for at least one being to perform, and inability to perform actions that are less than near to 100 per cent good existing in worlds that exhibit the degrees and kinds of evils that are to be found in the actual world.

(5) One might suppose that there are other, less familiar, reasons for holding that it is simply impossible for some excellences to be near-perfectly instantiated. Consider knowledgeability. Suppose that the ideal for knowledgeability is knowledge of 100 per cent of true propositions, but that this ideal is not possibly instantiated. Suppose further that near-perfect knowledgeability consists of knowledge of all but one true proposition, say p. Then there is a straightforward argument that it is impossible for anything to be near-perfectly knowledgeable. For suppose that r is a true proposition distinct from p. If a subject does not know p, then that subject does not know the conjunction (p&r). Whence it is plainly impossible for a being to lack knowledge of just one proposition, or of just a few propositions. (How can we describe a smallest departure from perfect knowledgeability that is not defeated by this objection? I think as follows. Suppose that $\{p_i\}$ is a set of logically independent propositions whose closure under entailment contains all and only the true propositions. Choose one of the p_i's, and consider the closure under entailment of what is left when that proposition is omitted from the starting set. If you think that there are items of knowledge that are not logically related, but that stand or fall together, then you will think that it may be necessary to throw out more of the logically independent propositions that belong to the starting set.)

Given this sample of objections to the near-perfect being interpretation of Anselmian theism, it seems quite plausible to claim that this interpretation fares even worse than the perfect being interpretation of Anselmian theism on all counts. On the one hand, it is hard to see that the near-perfect being interpretation of Anselmian theism avoids any of the *major* objections to the perfect being interpretation of Anselmian theism; and on the other hand, there are *serious* objections to the near-perfect being interpretation of Anselmian theism that are not objections to the perfect being interpretation of Anselmian theism.

3.1.15 A maximal being?

Suppose that we take Anselmian theism to be grounded in the claim that there is a maximally overall excellent being, i.e. a being that is maximal with respect to overall excellence. What reasons might one have for refusing to accept this claim, i.e. what reasons might one have for refusing to believe that there is such a maximally overall excellent being?

(1) One might reject the Excellence Assumption. That is, one might be a non-cognitivist or an error-theorist about excellences; or one might deny that there is a property of overall excellence; or one might deny that the overall excellence of a thing is determined by its particular excellences.

(2) One might suppose that overall excellence is unbounded: that is, one might suppose that, for any possible being x, there is a possible being y which exceeds or surpasses x in respect of overall excellence. Or one might suppose that, while overall excellence is bounded, the bound is not possibly attainable, even though it can be arbitrarily closely approached. (Or one might suppose that it is simply inscrutable whether it is likely that the bound is possibly attainable. Etc.)

(3) One might suppose that it is likely that, if there is one possible being whose overall excellence is not exceeded by any other possible being, then there are many possible beings whose overall excellence is not exceeded by any other possible being. (This might be because there are very few possible comparisons of overall excellence between possible beings, i.e. because most pairs of possible beings cannot be ranked for overall excellence. Or it might be because of the details of one's favoured conception of possibility.)

Given this sample of objections to the maximal being interpretation of Anselmian theism, it is clear that there are formidable barriers to the idea that there are *persuasive* Anselmian ontological arguments; and it also seems plausible to suggest that there are formidable objections to the idea that there are good *a priori* grounds for acceptance of the claim that there is instantiation of the characteristic formula of Anselmian theism. However, it is also worth observing that Anselmian theists have *other* reasons to be dissatisfied with this interpretation. In particular, there is no *a priori* guarantee that a maximally excellent being will be worshipworthy, or divine, or even properly described as a 'god'. As we saw in section 3.1.11, depending upon the details of one's account of possibility, it may turn out that a maximally overall excellent being is *very, very far* from being a perfect being or a near-perfect being. While there is perhaps some initial plausibility to the claim that a perfect being or a near-perfect being is worshipworthy, or divine, or properly described as a 'god', it is very hard to see that any plausibility attaches to the claim that a maximally overall excellent being is worshipworthy, or divine, or properly described as a 'god' (unless, perhaps, that maximally overall excellent being is *sufficiently close* to being perfect or near-perfect).

3.1.16 Lessons

Recall the characterisation of Anselmian theism with which we began. According to Anselmian theism: (1) there is a being than which none greater can be conceived; and (2) it is knowable on purely – solely, entirely – *a priori* grounds that there is a being than which none greater can be conceived. If we suppose that a being than which none greater can be conceived is a perfectly or ideally excellent being, then we see that it is *very* implausible to suppose that we know that there is such a being on purely *a priori* grounds. In particular, it seems quite implausible to suppose that much of our knowledge of metaphysical possibility is purely *a priori*. Moreover, it seems highly plausible to maintain that there are theories of metaphysical possibility that cannot be ruled out on purely *a priori* grounds, but which rule out the possibility that there is a perfectly or ideally excellent being. On the other hand, if we suppose that a being than which none greater can be conceived is a maximally excellent being, then we see that it is *very* implausible to suppose that we know that there is such a being on purely *a priori* grounds, at least given the further requirement that we know *a priori* that the being in question is worthy of worship, divine and properly characterised as a 'god'. For, once again, it seems quite implausible to suppose that much of our knowledge of metaphysical possibility is purely *a priori*. And, moreover, it seems highly plausible to maintain that there are theories of metaphysical possibility that cannot be ruled out on purely *a priori* grounds, but which do not allow the possibility that there is a maximally excellent being that is worthy of worship, divine and properly characterised as a 'god'. Furthermore – for the same kinds of reasons – even if we drop the further requirement that we know *a priori* that the being in question is worthy of worship, divine and properly characterised as a 'god', it seems highly plausible to maintain that it is at best *a priori* inscrutable whether there is a maximally excellent being.

Given the above conclusions, it also seems reasonable to suggest that Anselmian theism gains traction by conflating notions that ought to be distinguished: if we slide backwards and forwards between the claim that there is a perfectly excellent being and the claim that there is a maximally excellent being, then we may fail to notice the cracks that open up when we are careful in marking the distinctions that these claims require.

Finally, given the foregoing discussion, it might seem reasonable to suggest that Anselmian theism is not adequately captured by the standard formula, no matter how that standard formula is interpreted. Suppose that we *stipulate* that a 'god' is a divine supernatural being that creates

universes *ex nihilo*. Then it might perhaps be thought that a more plausible starting formula for Anselmian theism is like this: *a maximally excellent god*. Given this formulation of the characteristic claim of Anselmian theism, then we would not need to worry that a being characterised by the formula is not divine, or supernatural, or properly described as a 'god'. (We might still face the worry that some will say that a being characterised by the formula is not worthy of worship. But some – for example Sobel (2004: 24) – have suggested that even a perfect being might not be worthy of worship. Perhaps we can be excused from worrying about this further point.) However, if we suppose that the characteristic formula is 'a maximally excellent god' – with the interpretation of 'god' that we have introduced – then it surely clear that we do not have good purely *a priori* grounds for claiming that there is a being that satisfies that formula. Given that it is part of Anselmian theism that it is knowable on purely *a priori* grounds that there is at least one – or perhaps even exactly one – being that satisfies the characteristic formula of Anselmian theism, it seems that it is not open to Anselmian theists to modify the characterising formula in the proposed fashion. (We might appeal to the authority of theists such as Aquinas on this final point: we do not know on purely *a priori* grounds that the universe was created *ex nihilo* by a maximally excellent being; at best, we know this – if we know it at all – only on scriptural grounds.)

3.1.17 Comments on Nagasawa's 'new defence' of Anselmian theism

Nagasawa (2008) offers a 'new defence' of Anselmian theism. In outline, his defence runs as follows: All – or, at any rate, almost all – existing objections to Anselmian theism suppose that Anselmian theism is committed to the claim that there is a perfect being. Consequently, Anselmian theism can be defended against all – or, at any rate, almost all – existing objections if it is supposed, instead, that Anselmian theism *might* merely be committed to the claim that there is a near-perfect being or to the claim that there is a maximally excellent being.

My outline of Nagasawa's argument involves what I take to be some sympathetic interpretation. Nagasawa actually claims that all – or, at any rate, almost all – existing objections to Anselmian theism assume that Anselmian theism is committed to the claim that there is a 'maximally knowledgeable, maximally powerful and maximally benevolent being' (577); and his alternative proposal is that Anselmian theism might be committed only to the claim that there is a being 'that has the maximal consistent set of knowledge, power, and benevolence' (586). However,

when he presents the 'epistemically possible scenarios' that are supposed to ground the suggestion that Anselmian theism might be grounded in the latter claim (587–91), those 'scenarios' involve minimal departures from a *perfectly* knowledgeable, *perfectly* powerful and *perfectly* benevolent being.

Given the distinctions drawn in this chapter, I think that it is most charitable to interpret his argument as I have done above. However, even if the argument is interpreted in this way, it should be clear why I think that it is open to serious objection. Even if we suppose that Anselmian theism is taken to be the view that (1) there is a being that falls somewhere between perfect excellence and maximal excellence; and (2) it is knowable on purely *a priori* grounds that there is a being that falls somewhere between perfect excellence and maximal excellence, the considerations advanced in the earlier sections of this chapter suggest that there are good reasons – and, indeed good *a priori* reasons – to reject (2), and that there are not good *a priori* reasons to accept (1).

While the foregoing considerations are, I think, sufficient to cast serious doubt on the conclusions for which Nagasawa argues, there are some further critical points that are also perhaps worth noting.

First, it is not true that all – or even nearly all – existing objections to Anselmian theism depend upon the assumption that Anselmian theism is committed to the claim that there is a perfectly excellent being (rather than a maximally excellent being). A quick scan of sections 3.1.13–15 shows that many of the same objections apply to Anselmian theism however we choose to interpret the key characteristic claim. Moreover, these are not novel objections: rather, the objections listed in sections 3.1.13–15 all fall among the standard objections that are lodged against Anselmian theism.

Second, as some of the discussion in earlier parts of this chapter suggests, one might reasonably worry that the force that Nagasawa attributes to consideration of 'epistemically possible scenarios' can be turned against Anselmian theism. If we suppose that considerations of 'epistemically possible scenarios' involving near-perfect beings can provide good *a priori* grounds for adopting an interpretation of the characteristic formula that is undecided between the perfect being interpretation and the maximal being interpretation, then we should surely allow that considerations of 'epistemically possible scenarios' – such as the scenario for logical space outlined in section 3.1.11 – provide good *a priori* grounds for holding that we should be undecided between various 'epistemically possible' conceptions of metaphysical possibility. But if we should be *a priori* undecided between 'epistemically possible' conceptions of metaphysical possibility, then it is quite clear that there are no good *a priori* grounds for espousing

Anselmian theism. But, if that is right, then Nagasawa's attempt to salvage Anselmian theism sends it to the bottom of the harbour.

Third, given Nagasawa's suggestion that Anselmian theists are committed to the success of Anselmian ontological arguments – see his discussion of Objection 3 at pp. 593f. – it is worth noting that our discussion suggests a novel response to that argument on the part of the Fool. When the Anselmian says that the Fool understands the expression 'being than which none greater can be conceived', the Fool should insist that he only understands that expression if it is disambiguated. On the one hand, if the expression is taken to mean 'perfectly excellent being', then the Fool acknowledges that a being than which none greater can be conceived 'exists in his understanding', but insists that the idea of a perfectly excellent being is (almost certainly) an unrealisable idealisation. On the other hand, if the expression is taken to mean 'maximally excellent being', then the Fool says that it is at best inscrutable whether a being than which none greater can be conceived 'exists in the understanding', since it is at best inscrutable – at least by the lights of the Fool – whether there is such a being; and, moreover, the Fool also adds that if there is such a being, then it is (almost certainly) not a being that is worthy of worship, divine and deserving of the appellation 'god'.

CHAPTER 4

Simplicity

Of all the core doctrines of traditional Western theology, perhaps none has received more summary dismissals than the doctrine of divine simplicity. Consider, for example, the throwaway remark made by Paul Fitzgerald (1985: 262) in his discussion of the views of Eleonore Stump and Norman Kretzmann on issues concerning divine eternity (my emphasis): 'This feature of eternality may be impossible to reconcile with the divine simplicity. *But that doctrine never had much to recommend it anyhow*.'

Fitzgerald's attitude towards the doctrine of divine simplicity is quite widespread, and is shared by many who are not otherwise particularly ill-disposed towards traditional Western theology. Even those who are far better disposed towards traditional Western theology are usually prepared to concede that the doctrine is hard to understand, let alone to accept. Thus, for example, at the beginning of her entry on simplicity in the *Blackwell Companion to Philosophy of Religion*, Eleonore Stump (1997: 250) writes (my emphasis): 'Among the traditionally recognised divine attributes regularly discussed by medieval theologians and accepted by them as part of orthodox religious belief, *the strangest and hardest to understand is simplicity*.' Nonetheless, despite the evident difficulties that face proponents of the doctrine of divine simplicity, there are many contemporary defenders of the claim that there is a simple monotheistic god. Moreover – as we shall see – there have been those who have been quite unfair in their dismissal of the intelligibility of the claim that there is a simple monotheistic god.

I shall begin this discussion with an examination of the swift rejection of the doctrine of divine simplicity in Gale (1991). Next, I shall proceed to an examination of attempted defences of the doctrine of divine simplicity before turning to my own account of the way in which this doctrine might plausibly be interpreted. While I am not at all confident that there is a coherent defence of the claim that there is a simple monotheistic god, I am not prepared to suppose that it is not even doxastically possible that this doctrine should be rehabilitated.

4.1 Gale's discussion

Given the nature of his book, it should come as no surprise that Gale (1991) gives pretty short shrift to the doctrine of divine simplicity. Taking into account his delight in philosophical combat, it seemed to me to be appropriate to use Oppy (2003) as an occasion to try to defend the apparently indefensible from Gale's attack upon it. In this section, I shall begin by repeating my earlier account of Gale's explanation of the doctrine, and his reasons for dismissing it. I shall then go on to respond to the counter-attack that Gale (2003) mounts on behalf of the claim that the doctrine of divine simplicity really is indefensible.

4.1.1 Gale's account of divine simplicity

Gale (1991: 23f.) presents the doctrine of divine simplicity in the following way: If God is an absolutely perfect being, then (1) God's existence cannot be dependent upon anything else, and (2) there can be no distinctions within God's nature. According to Gale, (1) entails that God does not instantiate any properties – since, if God did do this, God would be distinct from, and hence dependent upon, those properties. Furthermore, according to Gale, (2) entails that there is no distinction between God's properties – God's omnipotence is identical with God's omniscience, which is identical with God's omnibenevolence, and so on. Most of Gale's subsequent discussion focuses on the alleged consequence of (2), which we seem to be invited to think of as *the* doctrine of divine simplicity proper.

However, before we turn to that discussion, it seems worth noting that the way in which Gale sets up the view is obviously unhappy. On the one hand, according to Gale, (2) presupposes that God has properties: in effect, it says that God has exactly one property. On the other hand, according to Gale, (1) entails that God does not have properties: Gale says explicitly that it follows from (1) that God 'does not instantiate any properties'. So, on Gale's understanding of (1) and (2), it seems that one cannot consistently endorse them both: something has to go.

Clearly enough, Gale's implicit assumption is that (1) must go: it is simply absurd to suppose that God has no properties. Given that that view is simply absurd, the only claim worth discussing in the context of the question of divine simplicity is the view that God has exactly one property. We shall return to reconsider this matter after we rehearse the objections that Gale makes to the idea that God has exactly one property.

4.1.2 A difficulty in Gale's formulation

According to Gale, how one analyses the claim that God has exactly one property turns on how one chooses to interpret the word 'property'. On the one hand, the claim could be that God is a single property-instance; on the other hand, the claim could be that God is a single property. Neither of these views is particularly attractive.

However, before we get to objections to them, it is worth noting some further slippage in Gale's discussion: it is one question whether God *has* only one property; it is another question whether God *is* a single property. The formula which says that God's omnipotence is identical with God's omniscience, which is identical with God's omnibenevolence, and so forth, does not entail that God is that one property; rather, it entails no more than that God has only one property.

A plausible conjecture about what is doing the work here might be derived from Gale's gloss on (2), i.e. from Gale's gloss on the claim that there can be no distinctions within God's nature: 'were there any compositeness in God's nature, he would face the possibility of destruction through decomposition'. I suspect that what Gale takes to justify the move from *God has only one property* to *God is a single property* is the thought that if God has a property and yet is not identical to that property, then there is some 'compositeness' in God (and hence there is 'the possibility of destruction through decomposition').

This conjecture is at best plausible; it is not clearly supported by the text. What Gale explicitly discusses is what would follow if there were compositeness in God's nature; but what licenses the inference which I am discussing is what would follow if there were compositeness in God. If there is a distinction between God's nature and God, then we still do not have even a *prima facie* justification for the move from *God has only one property* to *God is a single property*. Perhaps it is part of the doctrine of divine simplicity – or, at any rate, of familiar modern presentations of that doctrine – that there is no distinction between God, God's existence and God's nature; but, at the very least, this claim requires some examination in the context of Gale's discussion.

Moreover, even if we accept that the requirement that there be no distinctions in God's nature licenses the move from *God has only one property* to *God is a single property*, it is not clear that the justification which Gale offers for the requirement is up to the job. Even if there are 'distinctions in God' or 'distinctions in God's nature', it is far from obvious that it follows that God 'faces the possibility of destruction through decomposition'. Of

course, if this worry is well founded, it is not a problem for Gale; rather, it is a problem for motivating the view that he takes to be the traditional doctrine of divine simplicity. However, since the idea that there can be internal or necessary relations between properties is such a familiar one, there is some reason to take this motivational difficulty as a reason for suspecting that we still have not arrived at a satisfactory characterisation of the doctrine of divine simplicity. (We shall return to this issue later.)

4.1.3 Gale's objections to divine simplicity

I begin by stating the objections that Gale makes to the doctrine of divine simplicity, before turning to a discussion of these objections.

A. Against the claim that God is a single property, Gale offers four objections. First, the identification of God with an abstract entity makes God conceptually unfit to be the personal creator of the universe; in particular, an abstract entity cannot be a causal agent. Second, the identification of God with a property has the unwanted consequence that no individual other than God can have any of God's properties; for surely God must be a person, be self-identical, be an entity and so forth. Third, it is just obvious that the properties identified in the crucial formula – omnipotence, omniscience, omnibenevolence and so forth – are different: the words 'omnipotence', 'omniscience', 'omnibenevolence' plainly differ in sense, and yet the sense of each is just the property which it expresses. Fourth, since it is obvious that, say, power and benevolence differ, there is good reason to think: (1) that increasing degrees of power and benevolence differ; and hence (2) that unlimited degrees of power and benevolence – i.e. omnipotence and omnibenevolence – also differ.
B. Against the claim that God is a single property-instance, Gale offers two objections. First, he claims that the identification of God with God's instancing some property does not really satisfy the intuitive desiderata for the doctrine of divine simplicity: on this approach, it will still be the case that God instantiates properties, and hence is dependent upon them. Second, the last of the considerations given in the previous case still applies: we have very good reasons to think that instances of omnipotence must be distinct from instances of omnibenevolence (notwithstanding considerations urged by Stump and Kretzmann on behalf of the contrary view).

C. Against the suggestion – attributed to William Mann – that God's properties are causal powers that are identical to God's instancing of them, Gale offers three objections. First, he claims that, as in the previous case, the identification of God with God's instancing some property does not really satisfy the intuitive desiderata for the doctrine of divine simplicity: on this approach, it will still be the case that God instantiates properties, and hence is dependent on them. Second, if it were true that properties are identical with their instancing in objects then, since properties are abstract entities, it will still follow that God is conceptually unfit to be the creator of the universe. Third, the last of the considerations urged in the previous two cases still applies: we have very good reasons to think that instances of omnipotence must be distinct from instances of omnibenevolence, whether or not these are taken to be causal powers.

In my view, the force of these objections varies considerably: some seem cogent, but others are plainly highly controversial. First, the strengths. It does seem to me that taking God to be a property, or a property-instance, or a causal power, wrongly places God in an inappropriate ontological category. Moreover, it seems to me that there are plainly good reasons for thinking that omnipotence and omniscience are distinct properties, if they are properties at all (and likewise for the corresponding claims about property-instances and causal powers). No doubt there is room for discussion of the details of Gale's arguments on these points; but there is no reason for me to pursue those considerations here.

Now, the weaknesses. First, Gale's discussion makes certain assumptions about the nature of properties that no defender of the doctrine of divine simplicity should grant. Gale simply assumes without argument that properties are the ontological shadows of meaningful predicates: properties are the senses of predicates, and even predicates like 'is an entity', 'is identical to' and 'is a person' express properties. Whether or not we add to this the assumption that entities are the ontological shadows of meaningful names, we shall very quickly get out the conclusion that, if God exists, then God has many distinct properties. (God is a person. God is self-identical. God is an entity. Etc. So the fussing about whether God's omnipotence is identical to God's omniscience, etc. then seems to be completely beside the point.) Second, Gale's discussion seems to be based on the assumption that the 'property-instance' variant of the view has to hold that God is identical with his instancing of certain properties. However,

on the one hand, that way of formulating the view seems to be at best of dubious coherence, since it seems to require that God is both that which instances the properties and the instancing of the properties; and, on the other hand, it seems far more natural to suppose that the view in question holds that God is identical to a trope, i.e. to what is sometimes called an 'abstract particular'.

Of these considerations, the first is far more important (at least for my present purposes). It seems evident that, if one were to try to defend the view that God is only one property, or that God has only one property, then one would have to assume that there are many predicates which fail to express properties, even though atomic sentences in which those predicates feature are true. But Gale's discussion is largely based on the assumption that, if one were to try to defend the view that God is only one property, or that God has only one property, then one would have to assume that there are many predicates with distinct senses which nonetheless express the same properties. Of course, Gale is aided in this assumption by the work of the theists whom he discusses: for example, Kretzmann aims to show that God's omnipotence is the very same property as God's omniscience, even though the expressions 'God's omnipotence' and 'God's omniscience' have very different senses. Since this brings us to one of the central controversies in recent discussions of divine simplicity, I shall now turn to a more detailed examination of the position that is defended by Kretzmann.

Perhaps it is worth noting, before we conclude this section, that there are many independent reasons for thinking that one could not combine the view that God has exactly one property with a generous conception of properties and property individuation. Consider the predicate '… possesses exactly one property'. Does this predicate express a property? If so, then we seem to have the makings of a proof that nothing can possess exactly one property, and perhaps even of a proof that anything at all will have infinitely many properties. Suppose that a has the property F. Then it also has the property of having at least one property (where this second property is distinct from F). So it also has the property of having at least two properties (where this third property is distinct from F, and from the property of having at least one property). And so on. If you allow that necessary extension suffices for property identity – and that is a highly contentious concession – you might be able to contest this argument; but, at the very least, the matter is surely not straightforward.

4.2 Kretzmann's defence

As a first approximation, Kretzmann (1983) takes the doctrine of divine simplicity to say that 'all of God's attributes are identical to one another' and that 'God is identical to each of his attributes'. Kretzmann gives a linguistic cast to his explanation of the doctrine. Suppose that we can decompose sentences into names and predicates, where predicates are what are left of sentences when names are removed from them. (*Example*: In the sentence 'God loves Abraham', 'God' and 'Abraham' are names, and '… loves ___', 'God loves …' and '… loves Abraham' are predicates.) As a first approximation, we might say that the function of names is to identify or 'tag' objects: 'God' refers to God, 'Abraham' names Abraham, etc. And, at this same level of approximation, we might say that the function of predicates is to express properties: '… is good' expresses the property of goodness, and '… loves ___' expresses the lovingness relation. However, as our examples bring out, while we can use predicates to express properties, we can also use names to refer to properties: 'goodness' names the property that is expressed by the predicate '… is good'.

Given these basic distinctions, Kretzmann offers three different formulations of the doctrine of absolute divine simplicity. On the first version, the characteristic form of words used to express the doctrine looks like this: 'God is identical with his goodness' or 'God is identical with God's goodness'; on the second version, the characteristic form of words used to express the doctrine looks like this: 'God is identical with goodness'; and on the third version, the characteristic form of words used to express the doctrine looks like this: 'God is identical with perfect goodness.' In each case, we are given words of the form 'God = F-ness', where what goes in for 'F-ness' is a name for a property. While, perhaps, we should not assume that *every* name for a property is the nominalisation of a predicate, we can note that *many* names for properties are nominalisations of predicates: 'goodness' is a nominalisation from the predicate '… good'. However, even in those cases where we use names for properties that are nominalisations of predicates, we must remember that a sentence of the form 'God = F-ness' says something very different from the sentence 'God is F.' For, while the latter sentence merely attributes the property of F-ness to God, the former sentence says that God is *identical* to the property of F-ness.

On Kretzmann's showing, the doctrine of divine simplicity says that all of God's attributes are identical one with another, and that God is identical

to each of his attributes. Thus, if we suppose that God's attributes are F-ness, G-ness, H-ness, etc., then the doctrine of divine simplicity will say that God = F-ness = G-ness = H-ness = … Thus, it seems, on the doctrine of divine simplicity, we are committed to the claim that God is an attribute, and to the claim that the attribute that is God admits of a diverse range of linguistic formulations: F-ness, G-ness, H-ness, etc.

In order to meet the worry that it seems pretty unintuitive to suppose that there could be literal *identity* between the various divine attributes, Kretzmann appeals to Frege's explanation of how it happens that there can be true identity statements involving names. On Frege's theory, a sentence of the form 'a = b' can be true and informative because it can be that the names 'a' and 'b' refer to the very same object even though they pick out that object using very different *senses*. If, for example, we use the name 'Hesperus' to pick out the very last 'star' visible in the morning sky, and the name 'Phosphorus' to pick out the very first 'star' visible in the evening sky, and the name 'Venus' to pick out the second major planet from the sun, then it is potentially informative to be told that Phosphorus = Hesperus = Venus. In general, on Frege's theory of language, every linguistic expression has both a sense and reference; in particular, every name has a sense which picks out the object that is denoted by the name (i.e. the referent of the name). Kretzmann says:

> If we bear in mind the analogy with Frege's paradigm, it is not hard to make sense of … simplicity. It might be said that, because of differing circumstances that apply only to us and not at all to the being itself, the absolutely simple being that is God is perceived by us sometimes in a way that leads us to perceive divine goodness, sometimes in a way that leads us to perceive divine power. Divine goodness and divine power are no more really distinguished from each other or from God than the morning star, the evening star, and Venus are three in reality rather than one.

It is not clear that 'the analogy with Frege's paradigm' really does provide an adequate response to the worry that it is intended to address. While Frege's theory is controversial, it has at least some *prima facie* plausibility in the case of names for things that are *objects*, on a common-sense understanding of that notion. We have no trouble understanding how it could happen that people come to have multiple names for an object – a planet, a person, a city, etc. – and yet fail to realise that these multiple names are names for the very same thing. However, it is not at all clear that this understanding transfers to the case of names for attributes: it is not nearly so straightforward to suppose that we understand how it could happen that people come to have multiple names for an attribute – for example

goodness – and yet fail to realise that these multiple names are all names for the very same attribute.

A key question to ask at this point concerns what we might call 'identity conditions' for attributes: if F-ness and G-ness are attributes, what is required in order for it to be the case that F-ness = G-ness? Consider, for example, two possible attributes of rectilinear plane figures: the attribute of *having just three equal interior angles* and the attribute of *having just three sides of equal length*. In Euclidean space, these attributes are necessarily co-instantiated in rectilinear plane figures, since, necessarily, each of these attributes is possessed by all and only equilateral triangles. But should we conclude from this that they are *the very same* attribute? And, if we are not prepared to allow that this is a case in which we have two distinct predicates in the English language that express the same attribute, then what would be a clear, uncontroversial case of that kind?

Even if we suppose that we *can* make good sense of the idea that there might be multiple predicates in English that express – or multiple names in English that stand for – the very same attributes, it is not clear that we have a sufficient answer to worries that naturally arise in connection with the doctrine of divine simplicity. For, even on the most casual metaphysics, there seems to be something intuitively wrong with the idea that God is an attribute, the more so because it is clear that we are not to suppose that there is some other entity of which God is an attribute. If we suppose – as seems pre-theoretically plausible – that attribute-instantiations are always instantiations of attributes in distinct entities, then it just does not make any sense at all to suppose that God is an attribute – an instantiation of an attribute – even though there is no distinct entity in which God is instantiated. (To mention just one of the problems here: while we are happy to suppose that familiar objects act in virtue of their attributes, we do not happily suppose that attributes are independent causal agents. When confronted with the corpse at the murder scene, we may speculate that the murderer committed the murder because he was enraged, but we will not even consider the hypothesis that the victim met his fate at the hands of the 'non-instantiated' attribute of enragement.)

There is at least one further intuitive difficulty for Kretzmann's formulation of the doctrine of divine simplicity that deserves mention. In his final formulation of the doctrine, Kretzmann holds that it requires that 'perfect power is identical with perfect goodness', but that it does not require that 'power is identical with goodness'. However, if we suppose that it is true that 'God is good', and we suppose that to say that God is good is to attribute goodness to God, then it seems that the doctrine of divine

simplicity requires us to say that God is identical to goodness. (And, likewise, if we suppose that it is true that 'God is powerful', and we suppose that to say that God is powerful is to attribute power to God, then it seems that the doctrine of divine simplicity requires us to say that God is identical to power.) Thus, it seems, either Kretzmann is committed to saying that it is not strictly speaking true that God is good, or else Kretzmann is committed to the denial of the claim that to say that God is good is to attribute goodness to God. But the former path is surely counter-intuitive for most believers; and the latter path seems to undermine understanding of exactly what Kretzmann means by the word 'attribute'.

Even on this brief discussion, it seems reasonable to conclude that Kretzmann has not done nearly enough to support the suggestion that 'simplicity might be made sense of', given the linguistic cast that he gives to the doctrine.

4.3 Truth-making

In view of the difficulties that confront Kretzmann's attempt to defend the doctrine of divine simplicity, it is worth casting around for an alternative interpretation of the doctrine. I think that a promising interpretation can be constructed within the bounds of truth-maker theories.

The core of my alternative interpretation is the thought that, while God is a truth-maker for all of the true claims of the form 'God is F', it does not follow from this that there is a property that corresponds to the predicate 'F' that is possessed by God.[1] Provided that we deny that all predicates express properties – or, perhaps, that we deny that all successful singular terms denote objects – we may suppose that many sentences of the form 'Fa' which are true are not made true by the possession on the part of the referent of 'a' of the property which is expressed by the predicate 'F'.

One familiar paradigm for the kind of view which I have in mind is the realism about universals which is defended by David Armstrong (1978; 1997). On this view, immanent universals are part of the furniture of the universe; but it is up to science to determine what these immanent universals are, and the guide that is provided by natural language is shaky at

[1] Anyone who accepts the thought in question is likely to accept the further thought that God is *the* minimal truth-maker for each of these true claims. For discussion of truth-maker theory see, for example: Bigelow (1988), Fox (1986), Heil (2005), Mulligan et al. (1984), Oliver (1996) and Restall (1996). Further details about the nature of the theory – e.g. whether it is or is not committed to the existence of minimal truth-makers in every case – are not relevant for the purposes of the present discussion.

best. That a sentence of the form 'a is red' is true does not entail that there is a property of redness which is expressed by the predicate '… is red'; rather, what it entails is that there is some suitable constellation of universals which somehow together contrive to make it the case that the sentence is true. That a sentence of the form 'a exists' or 'a is self-identical' is true does not entail that there are properties of existence and self-identity which are expressed by the predicates '… exists' and '… is self-identical'; rather, these sentences are made true simply by the object which is the referent of the singular term 'a'. That two sentences of the form 'a is red' and 'b is red' are both true does not entail that there is some universal which plays a role in making both of these sentences true; it is possible that none of the universals which play a role in making true the sentence 'a is red' have any role to play in making true the sentence 'b is red'. (This point is supported by those lines of thought that suggest that, from a scientific standpoint, 'redness' constitutes a highly gerrymandered and heterogeneous 'kind'.)

In order to develop an account of divine simplicity, a natural thought is that we might seize upon *some* of the general features of Armstrong's view. Suppose that it is not the case that every predicate that features in true atomic sentences expresses a property. Suppose, more generally, that the nature of the reality that makes true sentences true does not have a structure that is reflected in the grammatical structure of the sentences that are made true. Then, holding that sentences of the form 'God is F' are true does not require us to suppose that there is some property that corresponds to the predicate 'F' that is possessed by God and that contributes to making the sentence in question true. So, we can say, on the one hand, that God is omnipotent, omniscient and all the rest – and we can mean what we say in a straightforward literal sense; and we can also say, on the other hand, that God has no parts and that there are no categorical distinctions to be drawn in the case of God. We can say that God is the truth-maker for the claim that God exists, that God is self-identical, that God has no parts, that God is not a property, that God is not an entity, that the ontological category to which God belongs is *sui generis* and so forth. Moreover, we can say that God is also the truth-maker for the claim that God is omnipotent, that God is omniscient, that God is omnibenevolent and so on. And we can say that God is the truth-maker for the claim that God is powerful, that God is good, that God knows some things and so forth.

What assumptions do we need to make in order to support this approach? I think that we shall need to suppose that there are no predicates *that express universals* that apply to God and to other entities. So, for

example, since '…is powerful' applies both to God and to other entities, we shall need to suppose that there is no universal of powerfulness. But that seems plausible enough: when sentences of the form 'a is powerful' are true, this is doubtless because there are truth-makers involving members of metaphysically fundamental categories which somehow combine to make these sentences true. Of course, in the case of God, we are also supposing that God does not instantiate universals; so we need the further supposition that the metaphysically fundamental categories which somehow combine to make these sentences true are heterogeneous. However, once we have granted the other elements of the kind of truth-maker theory that is here envisaged, it is not clear that this further supposition is out of the question. If 'redness' can be metaphysically gerrymandered and heterogeneous, then why shouldn't any 'properties' that are shared by God and other entities also be like this?

4.4 Some further questions addressed

Plainly there are many questions that might be raised about the suggestion that I made in the previous section. I shall try to address some of the more obvious questions here.

4.4.1 Negative theology and analogical predication

One strand of traditional theological thought that seems to me to be related to the doctrine of divine simplicity is typically expressed in claims about limits to our ability to understand God. Sometimes it is said that we can make no true positive claims about God. (I associate this claim with the label 'negative theology'.) Sometimes it is said that we can only speak in an analogical or metaphorical fashion about God: while we speak truly when we say, for example, that God is powerful, we are here involved in the irreducible use of analogy, or metaphor, or the like; we cannot provide a literal equivalent for the claim that is here expressed in analogical fashion. Sometimes it is said that we can only speak in an equivocal fashion about God: while we speak truly when we say, for example, that God is wise, we must not suppose that the sense of the predicate '… is wise' is the same in its application to God as it is in its application to other creatures, such as human beings. (I associate these latter two claims with the label 'analogical predication'.)

The account that I have given of divine simplicity provides a way of understanding all of these claims. On the one hand, there is a sense in

which all of these traditional claims are false: we *can* make true positive claims about God; we *can* make true literal claims about God; and we *can* apply predicates to God that have exactly the same *sense* which they have when they are applied to other creatures. However, on the other hand, we must not suppose that when we say something which is literally true of God, that we can read off the ontological structure of that which makes the sentence true from the surface syntactic form of the sentence in question; and nor should we think that there is any other sentence that we could use instead for which it would be true that we could read off the ontological structure of that which makes the sentence true from the surface syntactic form of the sentence in question. Thus there is a good sense in which the spirit of all of the traditional claims is preserved under my suggestion; and, moreover, that this preservation does not come at the high price of engaging in doublethink, or doubletalk, or the like.

The model afforded by Armstrong's treatment of '… is red' should be borne in mind here. The doctrine of divine simplicity belongs to a philosophical theory that greatly predates the linguistic turn and the consequent deflationary approach to metaphysics that supposes that basic metaphysical categories must be mirrored in the surface syntax of canonical notation. Attempts to discuss the doctrine while also making using of pleonastic conceptions of properties, objects, states of affairs and the like seem to me to be bound to end in disaster. Of course, friends of the linguistic turn and deflationary metaphysics may well conclude that this is bad news for the doctrine of divine simplicity; however, it does seem to me to advance understanding of the issues involved to cast them in this kind of light.

4.4.2 *Contingent truths about God*

Perhaps the most apparently intractable problem for the doctrine of divine simplicity concerns the treatment of contingent truths about God. Suppose, for example, that we want to hold that, while God does choose to answer a particular prayer, it is possible for God to choose not to answer that prayer. Consider our world, in which God does choose to answer the prayer in question, and a world which is as much like ours as possible, save for the fact that in that world God chooses not to answer the prayer. Given that the sentence 'God chooses to answer this prayer' is true in our world, but not in the other world, it is natural to think that there must be a truth-maker for the claim in our world which is not present in the other world. But, on the view which has been put forward, it

may seem impossible to explain how this can be the case. In our world, God (perhaps together with some other 'things') is the truth-maker for the sentence 'God chooses to answer this prayer'; in the other world, God (perhaps together with some other 'things') is the truth-maker for the sentence 'God chooses not to answer this prayer.' Unless there is some relevant difference between God in our world and God in the other world, there is no prospect of maintaining the view. But if there is a difference between God in our world and God in the other world, then – contrary to the doctrine of divine simplicity – there must be parts, or respects, or whatever, of God that vary between the worlds.

One response to this question – which many traditional theologians at least countenanced as a possible reply – is to deny that there is any contingency in God. If God chooses to answer a given prayer in our world, then there is no world in which God chooses not to answer that prayer. This line of response has severe implications for freedom – both human and divine – and might well be considered too high a price to pay for the doctrine of divine simplicity. But what other options do we have?

I think that the right way to respond is to deny the claim that if God chooses to answer a given prayer in one world, and chooses not to answer it in another world, then there must be parts, or respects, or whatever, of God which vary between the worlds. In our world, God (perhaps together with some other 'things') is the truth-maker for the claim that God chooses to answer the prayer; in the other world, God (perhaps together with some other 'things') is the truth-maker for the claim that God does not choose to answer the prayer. Perhaps the truth-making relation is itself contingent;[2] perhaps God can differ between the two worlds even though there is no part, or respect, or whatever, of God which differs between the two worlds;[3] perhaps the truth-makers for the sentence 'God chooses to answer the prayer' involve things other than God which do vary between the two worlds;[4] or perhaps there is some other explanation of how this

[2] Josh Parsons has ably defended the tenability of the denial of what he calls 'truthmaker essentialism' (in his doctoral dissertation and elsewhere); this denial is just the claim which is countenanced in the text. See, for example, Parsons (1999).

[3] Given that we are supposing that God is metaphysically *sui generis*, and, in particular, that we are supposing that there is no complexity or composition of any kind in God, it is not clear that we are stretching things any further if we suppose that there can be brute differences across worlds in the case of God, i.e. differences which are not a difference in parts, or respects, or whatever. Granted, this sounds odd; but it is not clear that it is any odder than everything else that is tied up in the doctrine of divine simplicity.

[4] This line may seem to fly in the face of the intuition that the property of choosing to do such-and-such is an intrinsic property of the chooser, and hence something which is made true entirely by how things are with the chooser, and not at all by how things are with other things. However, if we

can be. There are enough options available that there is clearly quite a bit of room in which to manoeuvre.

4.4.3 Lack of composition

Much of the recent – and not-so-recent – discussion of doctrines of divine simplicity has focused on questions about the identification of properties – for example *When is F-ness identical to G-ness? When is the F-ness of x identical to the G-ness of x?* and so on – and on questions about the identification of God with a property, or a property instance, or a causal power, or the like – for example *Is God identical to F-ness? Is God identical to his F-ness? Is God identical to his instancing the property of F-ness?* and so forth. Given the importance that discussion of these kinds of questions has in the theological tradition, it might be claimed that my suggestion – which holds that these questions either admit of straightforward negative answers (in the case of the latter category), or else are irrelevant to the doctrine of divine simplicity (in the case of the former category) – must involve some kind of misunderstanding. Augustine, Anselm, Aquinas and many others[5] seem to be agreed that the doctrine of divine simplicity requires the identification of God with a property, or a property instance, or a causal power, or the like; and this agreement, in turn, seems to require that consideration be given to questions about the identification of properties. So who am I to say otherwise?

I take it that the core of the doctrine of divine simplicity is – as Stump (1997: 250) says – that 'God is one in a radical kind of way: a simple God lacks composition of any kind.' Moreover – as Stump (1997: 250) continues – I agree that it follows from this core claim: (1) that God has no spatial or temporal parts; (2) that God has no intrinsic accidental properties; (3) that there is no 'real' distinction between essential properties in God's nature; and (4) that there is no 'real' distinction between essence and existence in God. However, I think that the reason why (1)–(4) follow from the core claim is that only a being which has no properties can lack

are supposing that there is no universal which is expressed by predicates of the form '… chooses to do such-and such', then it is not clear that we are any longer entitled to the intuition. Again, there is something here which looks odd; but it is not clear that it is any odder than everything else which is tied up in the doctrine of divine simplicity.

[5] For recent discussions which take these issues seriously see, for example: Bennett (1969), Burns (1989), Dewan (1989), Hughes (1989), Hughes (1995), La Croix (1977; 1979), Lamont (1997), Leftow (1990), Mann (1975; 1982; 1983; 1986), Miller (1994), Morris (1984; 1988), Plantinga (1980), Rogers (1996), Stump (1997), Stump and Kretzmann (1985; 1987), Vallicella (1992; 1994), Wainwright (1979) and Wolterstorff (1991).

composition of any kind; hence, of course, God has no spatial or temporal properties, no intrinsic accidental properties, no essential properties and no essence or nature. Once we take on board the key neo-Platonist intuition about God, we should give up on the idea of applying the key categories of Aristotelian metaphysics to God: the result is bound to be a conceptual mess. Of course, I have not proved that the result is bound to be a conceptual mess.[6] However, I think that a quick look at the historical record provides ample support for this claim. Alternative ways of understanding the claim that God lacks composition of any kind are clearly worth serious consideration if they manage to avoid the difficulties which have beset traditional explanations of this doctrine.

4.4.4 No properties?

I expect that some philosophers will want to object that I have not really succeeded in producing a defensible version of the doctrine of divine simplicity because I have not explained how anyone could come to have reason to accept the doctrine in the form that I have given to it. What reason could one have for believing that God has no properties; come to that, what reason could have for believing that it even makes sense to suppose that God has no properties?

Well, let's see. It is fairly uncontroversial that the doctrine of divine simplicity requires that God is not dependent upon anything, that God has no parts, that there are no distinctions in God and so forth. The principal challenge which the doctrine affords is how to reconcile these claims with further claims about God which believers standardly suppose to be true, for example that God is wise, sympathetic, responsive to prayer and so forth. The standard philosophical response has been to claim that God

[6] Consider, for example, Stump (1997: 251): 'God is so radically one that there is no composition in him even of essence and existence. Consequently, God does not have an essence; instead, he is identical with his essence, and even his existence cannot be distinguished from that essence.' This looks incoherent: on the one hand, we are told that God has no essence; on the other hand, we are told that God's essence – the thing whose existence has just been denied! – is identical to God's existence. While this pattern – of claiming to identify things that one elsewhere says do not exist – seems characteristic of much of the literature on divine simplicity, it might be argued that the appearance is more in the eye of the careless reader. The claim that is defended here by Stump is that God does not *have* either essence or existence; rather than suppose that God is a subject of which essence and existence can be predicated, God is identified with God's essence and God's existence, neither of which is predicated of any subject. But does this suggestion really solve the difficulties that we face? How are the expressions 'his essence' and 'his existence' to be understood, if not in terms of the possession of essence and existence by a subject to which they properly belong? If God has no essence, then surely the expressions 'his essence' and 'God's essence' fail to refer to anything.

belongs to an unexpected but standard ontological category: God is a property, or a property-instance, or a self-instancing property, or the like. However, this standard kind of response surely goes too far in specifying the ontological category to which God belongs. Far better to say that God is metaphysically *sui generis*, and that there is nothing further to be said about the ontological category to which God belongs. With the standard reply, we can say that there is a single truth-maker which makes a diverse range of sentences true; but we do not need to say any of the manifestly bizarre-sounding things which proponents of the standard response also say. After all, it is no easier to understand how a property-instance could be a truth-maker for familiar claims about God than it is to understand how something that is metaphysically *sui generis* is a truth-maker for those claims.

But how does all of this answer the charge that it makes no sense to suppose that God has no properties? And isn't that very claim as bizarre sounding as any of the claims that belong to the standard response? Well, remember that the claim that God has no properties is to be understood in the following way: it is not the case that God shares the same metaphysical structure as other 'things' that are somehow constituted from universals (and perhaps other metaphysically primitive materials, such as bare particulars, and the like). God differs from other 'things' in not having metaphysical composition of this (or any other) kind. But, given that we accept something like Armstrong's views about the truth-making relation, there are no *further* mysteries or bizarre stipulations that are required in order to make sense of divine simplicity: we are already committed to the view that the surface syntax of true sentences is no decent guide to the metaphysical structure of the truth-makers for those sentences. And there is no reason to suppose that our knowledge that certain sentences express truths requires us to have detailed knowledge of how it is that the truth-makers conspire to make the sentences in question true. (Again, recall the way that Armstrong treats sentences of the form 'a is red'.) We can know that God is wise without having any insight into God's metaphysical constitution, i.e. without having any knowledge about how the claim that God is wise is made true.

Perhaps it will be said that this is still a sticking point: what sense does it make to suppose that we can know that certain sentences are true when we are also forced to say that we have – and can have – no knowledge about how the truth-makers for those sentences make those sentences true? Perhaps this is a sticking point. Certainly, it seems to me to mark a divide between those philosophers who take the 'linguistic turn' and

those who do not; however, if this is an important sticking point, then it is surely useful to have recognised that it is the key point on which doctrines of divine simplicity stand or fall. (It seems to me to be consonant with long-standing theological tradition to suppose that we can have no insight into the 'nature' of God, and yet that we can make many claims about God which are literally true. I do not know of any way of making sense of this tradition other than to take the line on truth-making that I have taken in this chapter.)[7]

[7] The positive view developed in this chapter is taken directly from Oppy (2003). Since then very similar views have been developed by, among others, Bergmann and Brouwer (2006), Brouwer (2008; 2009) and Pruss (2008). While Vallicella (2010) seems to suggest that my view is somehow very different from these other views, I agree with Pruss (2008), who maintains that they are all essentially developments of the same underlying view.

CHAPTER 5

Eternity

The view that there is an *eternal* monotheistic god is widespread. Some monotheists suppose that the god in which they believe exists outside of space and time, and is causally responsible for the existence of the spatio-temporal realm that we inhabit. Other monotheists suppose that the god in which they believe does exist in time, though, again, that god is causally responsible for the existence of the spatio-temporal realm that we inhabit, and for the existence of the temporal realm within which the monotheistic god abides. Amongst proponents of this latter account, some monotheists suppose that their god has always existed in time, even though their god is causally responsible for the existence of time, while other monotheists suppose that their god has not always existed in time, even though – of course – there is no time at which their god has failed to exist. There is further diversity in the views of those who suppose that god has not always existed in time that we shall come to examine in due course.

We begin our discussion with an attempt to provide an exhaustive taxonomy of the different views that might be taken about the relationships that exists between monotheistic gods and time. Then we provide some comments on important recent discussions of divine eternity, including the account of ET-simultaneity in Stump and Kretzmann (1981), the defence of divine timelessness in Leftow (1991), the discussion of God prior to creation in Craig (1979) and the defence of the claim that there is a temporal monotheistic god in Swinburne (1994). Our aim will not be to take a position on the question of God's relationship to time – though, in the end, we will allow that we can make sense of both of the competing positions – but rather to point to some of the difficulties that arise on either side.

5.1 Introductory considerations

The suggestion that a given monotheistic god is *eternal* is not easy to evaluate. There are various different views that might be taken about the

relationship that exists between the times of our universe and an eternal god. Some of the views that have been adopted by philosophers and theologians may not be so much as coherent; nonetheless – as noted above – our first task is to try to provide a survey of the doxastically possible positions that can be adopted on the question of the relationship that holds between the times of our universe and an eternal god.

One view that might be taken is that time is an *essential* aspect of reality, one that obtains in all possible worlds as a matter of metaphysical – or perhaps even logical – necessity. On this view, if we suppose that the existence of a monotheistic god is not a matter of metaphysical – or logical – necessity, then there are possible worlds in which there is no monotheistic god, but there is no possible world in which there is no time. Nonetheless, even if we suppose that the existence of a monotheistic god is not a matter of metaphysical – or logical – necessity, we may nonetheless suppose that, in any possible world in which there is a monotheistic god, that god exists at all moments of time. While it would be possible to suppose that there is a first moment of time – and to suppose that a monotheistic god comes into existence at this first moment of time – it seems to me to be more consonant with familiar monotheistic doctrines to suppose that, if time exists as a matter of metaphysical – or logical – necessity, then it regresses infinitely into the past. Of course, if we adopt this conception of the relationship between our monotheistic god and time, then – quite apart from whether or not we suppose that our god exists as a matter of metaphysical – or logical – necessity, we shall be unable to argue for the existence of our monotheistic god on the basis of the impossibility of an actually instantiated infinite regress – i.e. most kinds of cosmological arguments will be placed immediately beyond our reach.

Another view that one might take is that the existence of time *depends upon* the existence of a monotheistic god. On this kind of view, there is no possible world in which time exists but in which there is no monotheistic god who brings it about that time exists. It seems to me that if one adopts this kind of view, then one is required to suppose that there are metaphysically – or logically – possible worlds in which there is a monotheistic god, but in which time does not exist; for how else are we to understand the claim that the existence of time *depends upon* the existence of a monotheistic god? If one supposes that it is a matter of metaphysical – or logical – necessity that there is a monotheistic god, then it cannot turn out that there are possible worlds in which there is neither a monotheistic god nor time; but, if one supposes that it is metaphysically – or logically – possible that there is no monotheistic god, then this kind of view will have

the consequence that there are possible worlds in which there is neither monotheistic god nor time.

One commitment of the view described in the previous paragraph is to the intelligibility of the claim that there is a possible world in which there is a monotheistic god, but in which there is no time. If the existence of time depends upon the existence of a monotheistic god, then we must be able to make sense of the atemporal – or non-temporal – existence of a monotheistic god. However, at least on some conceptions of monotheistic gods, it is very doubtful that we can make sense of the notion that these gods have atemporal – or non-temporal – existence. It might be conceded, at least for the sake of argument, that we can make sense of the idea that abstract entities – numbers, sets, propositions and the like – have some kind of atemporal – or non-temporal – existence: but how are we to make sense of the suggestion that a non-abstract, causally active being has atemporal – or non-temporal – existence? At the very least, we should be very cautious in supposing that an atemporal – or non-temporal – monotheistic god could have thoughts, or plans, or intentions, or feelings, or the like: for what conception can we form of atemporal – or non-temporal – thoughts, and plans, and intentions, and feelings, and the like? True enough, we can put together the words 'atemporal' and 'thought' to form the expression 'atemporal thought'; but this no more establishes that we understand the notion of an 'atemporal thought' than an exactly analogous argument establishes that we understand talk of a 'green idea' or a 'cautious square'.

Suppose that we set aside – at least for now – any worries that we might have about the coherence of the concept of an atemporal – or non-temporal – monotheistic god. The next question to be faced by any view that supposes that the existence of time depends upon the existence of a monotheistic god concerns the relationships that hold between a monotheistic god and time in those possible worlds in which the monotheistic god brings it about that the possible world is temporal. On the one hand, we might suppose that although the monotheistic god brings it about that there is a temporal universe, it is nonetheless the case that the monotheistic god is atemporal – or non-temporal; on the other hand, we might suppose that because the monotheistic god brings it about that there is a temporal universe, the monotheistic god is immersed in a temporal realm.

If we suppose that our monotheistic god is atemporal – or non-temporal – even though it creates a temporal universe, then we need to say something about how the monotheistic god is related to the temporal universe.

What kinds of relationships could hold between the non-temporal realm that a monotheistic god inhabits and the temporal universe to which we belong? Moreover, if we suppose – as many monotheists do – that at least some people will 'go to dwell in eternity', then we need to say something about the kinds of conceptions that we can form of the future existence that it is alleged that at least some of us will enjoy. If the afterlife is located in an atemporal – or non-temporal realm – then it must be possible for human beings – creatures like you and me – to have an atemporal existence. But how are we to make sense of the idea that human beings could have an atemporal existence? Can there be experiences if there is no time? It would seem not. But could human beings be said to exist in circumstances in which it is not possible for them to have experiences?

If we suppose that our monotheistic god is temporal because it creates a temporal universe, we may avoid some of the hard questions mentioned in the previous paragraph, but we shall still need to say something about how our monotheistic god is related to the temporal universe that we inhabit. Given that our monotheistic god is 'in time', should we also suppose that our monotheistic god is 'in space'? If so, where should we suppose that our monotheistic god is located? If not, then how are we to understand the relationship between the temporal realm to which our monotheistic god belongs and the temporal universe that we inhabit? As I noted in Oppy (2006b: 146) it is certainly possible to suppose that the metric in an FRW model can be extended through the initial singularity in those models, given appropriate assumptions about continuity/differentiability conditions.[1] So there is no immediate difficulty with the suggestion that the realm that our god inhabits is part of the manifold to which the visible universe belongs. But any suggestion of this kind would require that the realm that our monotheistic god inhabits is both temporal and spatial, contrary to the suggestion that our monotheistic god has no spatial location. If our monotheistic god has no 'spatio-temporal' location 'within' some kind of extension of the visible spatio-temporal universe, then it is very hard to see how we can make sense of the idea that our monotheistic god inhabits the same temporal realm that we inhabit.

Apart from general worries about the non-causal 'external' relations that hold between a monotheistic god and the temporal universe that it creates, there are also questions that arise about the nature of time in that

[1] An FRW (Friedmann–Robertson–Walker) model is a standard 'hot Big Bang' model for our universe. These models suppose that the universe is homogeneous and isotropic, and that the spatial component of the metric can be time-dependent.

temporal universe given that it stands in some kind of 'external' relationship to a creative monotheistic god. If we suppose that our monotheistic god is timeless – i.e. that our monotheistic god inhabits some kind of timeless realm – then there seems to be good *prima facie* reason to suppose that if that god is nonetheless 'externally' related to the temporal universe, then that universe is a 'four-dimensional' universe in which past, present and future all exist. If we suppose that our monotheistic god is non-temporal, then it seems that we are obliged to suppose that there is no 'succession' in the relations that hold between that god and the various times of the temporal universe. But if it is true that 'all times are present to god', then it is true that all times exist: there just is no distinction between the past, the present and the future when these are 'viewed from the standpoint of eternity'.[2] If we suppose that our universe is 'not fully four-dimensional' – because, for example, the future does not exist – then, it seems to me, we shall be obliged to suppose that our monotheistic god is temporal: either because time exists independently of that god, or because that god becomes 'immersed' in time as a result of its creation of time.

Whichever way we turn, then, there are very hard questions to face. I do not say that these questions cannot be given satisfying answers; however, as we shall see, it is certainly not easy to see how they could be given satisfying answers. In the following sections, I shall explore recent attempts to answer some of the questions that I have raised. First, I shall examine the attempt – by Stump and Kretzmann – to explain how an atemporal – or non-temporal – god might be related to our temporal universe. Second, I shall consider some of the difficulties that arise in Leftow's recent defence of the claim that there is an atemporal – or non-temporal – monotheistic god. Third, I shall examine Swinburne's attempt to defend the claim that there is a temporal monotheistic god. Finally, I shall briefly consider some of Craig's arguments about the relationship between his monotheistic god and time. I think that this discussion should help to make it plausible to suppose that there are not yet any satisfying answers that have been set out to the questions that I have posed in this chapter: for, if I am right, the

[2] It is probably worth noting that the suggestion here is *not* that the assumption that there is a relation between a temporal realm and a non-temporal realm somehow collapses distinctions within the temporal realm. There is no reason to think that it follows, from the alleged fact that times t_1 and t_2 are both 'present to eternity', that times t_1 and t_2 are simultaneous. However, if t_1 is 'present to eternity' and t_2 is 'present to eternity', then surely t_1 and t_2 are 'jointly present to eternity'; yet t_1 and t_2 can hardly be 'jointly present to eternity' unless t_1 and t_2 'jointly exist'. Given that there is *a* standpoint – 'the view from eternity' – from which it can be 'seen' that all times exist, it surely follows that it is simply (tenselessly) true that all times exist, even if it is also true that, from any particular temporal standpoint, it cannot be 'seen' – or 'given in direct experience' – that other times exist.

best recent accounts of the relationships that obtain between monotheistic gods and time raise more questions than they settle.

5.2 Stump and Kretzmann

Stump and Kretzmann (1981) provide a much-discussed attempt to characterise a relationship of ET-simultaneity that holds between the timeless eternal realm of the monotheistic god in which they believe and the spatio-temporal realm of the physical universe that we inhabit. In the face of various objections, they provided modifications and elaborations of the account in that original article – but, in my view, the subsequent discussion and defence failed to get to the heart of the matter. After a brief rehearsal of some of the main points of the debate about ET-simultaneity, I propose to argue: (1) that there is a straightforward definition of the notion of ET-simultaneity to be had; but (2) that this notion is not of any use in helping to clarify or explain the claim that God is timeless.

The initial definition which Stump and Kretzmann give is as follows:

> (ET) For every x and for every y, x and y are ET-simultaneous iff:
> (1) either x is eternal and y is temporal, or vice versa; and
> (2) for some observer, A, in the unique eternal reference frame, x and y are both present – i.e. either x is eternally present and y is observed as temporally present, or vice versa; and
> (3) for some observer, B, in one of the infinitely many temporal reference frames, x and y are both present – i.e. either x is observed as eternally present and y is temporally present, or vice versa.

Taking this definition at its word, its most obvious shortcoming is that it entails that the only times which can be 'present' to eternity are those in which there are observers. Pick some time at which there are no observers – indeed, pick a time very close to the Big Bang at which it is physically impossible for there to be observers: surely it ought not to be a consequence of any account of the relations between our spatio-temporal realm and the eternal realm that this time is not 'accessible' to eternity.

Typically, discussions of ET-simultaneity do not take the definition at its word: by 'observer' we should be taken to mean 'potential observer' or 'possible observer' or the like. However, it is not clear that this understanding of the definition helps – for it seems plausible to think that there are many regions of space-time in which there could not be observers (for example at the centre of stars, in regions subject to strong gravitational tidal forces, in regions near singularities – including the initial singularity at the Big Bang – and so on). Moreover, even if this were not so, it surely

could have been the case that God made a universe in which there could be no observers, and yet for which all space-time points were 'present' to God at eternity. Since the notion of ET-simultaneity ought to apply in that case, there is clearly something wrong with the definition – and hence with all subsequent amendments discussed by the various authors who have discussed this matter.

It seems to me that this defect in the Stump–Kretzmann definition stems from a misunderstanding about the role of 'observers' in early formulations of the theories of relativity. While it is true that much of the early discussion of the theories of relativity is framed in terms of 'observers' and 'coordinates' and 'frames of reference', it has long been known that it is possible to frame these theories in 'coordinate-free' versions. Moreover, it is very tempting to go on to claim that the 'genuine' or 'fundamental' properties and relations are the ones that appear in these 'coordinate-free' formulations. One consequence of this claim is that certain properties and relations which were previously supposed to be 'genuine' and 'fundamental' turn out not to be so – for example, there is no 'coordinate-free' notion of simultaneity in the theories of relativity.

Given that we are searching for a 'genuine' or 'fundamental' relation between the spatio-temporal and the eternal, we should not be looking for any kind of relation which is framed in terms of 'observers' (and 'coordinates' and 'frames of reference' and the like) – rather, we should be looking for a 'coordinate-free' relation. Such an account of the relation between the temporal and the eternal – i.e. of the notion of ET-simultaneity – is not hard to find:

> (ET*) For any x and y, x and y are ET-simultaneous iff one of x and y is (spatio)temporal and the other is eternal.

This is surely just the definition which is required: every (spatio)temporal point is 'present' to eternity; and eternity is 'present' to every (spatio)temporal point.

Of course, this definition does not 'illuminate' the relation between the temporal and the eternal; no one who is mystified by the claim that there might be non-spatio-temporal entities will suppose that this definition improves understanding. But exactly the same point could be made about the original definition (since 'eternally present', 'temporally present', 'observed as temporally present' and 'observed as eternally present' all require further elucidation in this context). Given that the aim is just to correctly characterise the relation between the eternal and the temporal, (ET*) does the job. At any rate, it seems clear that it does every job that

the original definition – and any of the subsequent amendments – was qualified to do, but without relying on any misunderstandings about the proper formulation of theories of relativity.[3]

5.3 Leftow

The most extensive – and arguably the most interesting – recent discussion of questions about divine eternity appears in Leftow (1991). Leftow defends the claim that God is timeless, but he makes use of a number of extremely controversial theses – not to mention dubious distinctions and suspicious arguments – in developing his defence of divine timelessness. I shall here indicate no more than a few of the difficulties that arise in the course of Leftow's defence of divine timelessness.

5.3.1 Argument for the impossibility of discontinuous spatio-temporal trajectories

At p. 23 Leftow argues that, as a matter of physical necessity, no parcel of matter follows a discontinuous spatial path. He then uses this conclusion as a premise in a further argument to the conclusion that no non-theistic scenarios involving contingently existing entities could yield a sure way to gain evidence that a second time series exists. I think that there may be non-theistic scenarios involving contingently existing entities which yield ways of gaining evidence of other time series – it could be, for example, that our best theories about the very early universe entail that there are many disconnected regions of space-time, each with its own time series – so I think that the further argument cannot be any good. However, the point I want to insist on here is that his argument for the conclusion that, as a matter of physical necessity, no parcel of matter follows a discontinuous spatial path is seriously flawed.

Leftow's argument is as follows: Consider an object that moves from P1 to P4 without following a continuous spatial path. Somewhere between P1 and P4, there are two points P2 and P3 such that the object 'jumps' from P2 to P3 without occupying any continuous sequence of places between them. For convenience, suppose that this 'jump' is the only discontinuity in the object's trajectory. If the instant at which the object reaches P2 is identical to the instant at which the object reaches P3, then the object is

[3] For a somewhat similar critique of accounts of ET-simultaneity – though without any mention of theories of relativity – see Swinburne (1994: 248–9).

wholly in two places at once. But that is impossible. Hence, there must be some temporal gap between the object's arrival at P2 and its arrival at P3. During this temporal gap, there is no place at which the object is located. But if there is a time (interval) at which a physical object is not located anywhere, then at that time (during that interval) the object does not exist. But it is a matter of natural law – physical necessity – that objects do not cease to exist and then pop back into existence some time later. QED.

There are various things that one might dispute in this argument. The phenomenon of quantum tunnelling – which does apply to macroscopic objects, though the probability is *extremely* small – suggests that it is quite compatible with what is plausibly taken to be natural law, that objects do have spatio-temporal gaps in their world-lines. Even if this were not so, it is hard to see how one could be very confident that discontinuous time travel is prohibited by natural law (physical necessity) – perhaps it is just a matter of boundary conditions that there is (or appears to be) no discontinuous time travel in our world. And so on.

However, the crucial point on which I wish to insist is that a key move in the argument is invalid, and relies on an important misunderstanding about the nature of continuous motion. Leftow assumes that there must be distinct points P2 and P3 such that the object 'jumps' from P2 to P3 without occupying any points in between. And, on the basis of this assumption, he infers, from the claim that the object cannot be simultaneously at P2 and P3, that there must be a temporal gap between the object's arrival at P2 and its arrival at P3. But the assumption is surely mistaken. If an object is to follow a discontinuous trajectory with a single spatial 'jump' but no temporal 'jump', then one part of the trajectory will be an open interval and the other will be a closed interval. (Consider an ordinary continuous motion, and make a 'cut'. If the point at which the 'cut' is made is assigned to just one of the two parts which result, then one of the parts will be open and the other will be closed. The assumption that one would get two closed parts with no point in common is just the mistaken assumption that each point has an immediate successor – something that is certainly not true in the continuous case.) To think that this is impossible is just tacitly to deny that genuinely continuous motion is possible.

Leftow's argument has impressive precursors. Thus, for example, we find Aristotle in the *Physics*, VIII, 8, 262a19–263a3 arguing in support of the claim that, when Achilles is travelling continuously, we must not say that he reaches or arrives at any point which he passes through, as follows:

If Achilles arrives at a point in his journey, then he clearly also leaves the point, for otherwise he would remain there, and hence never reach the tortoise. But at the time when Achilles has arrived at the point, he is at the point; whereas at the time at which he has left the point he is not at it, but beyond it. So the time when he has arrived and the time when he has left are not the same time – and consequently they must be separated by an interval. But during that interval Achilles must evidently be at the point, since he has arrived at it but has not yet left it, and so we may conclude that if Achilles reaches or arrives at any point in his journey, he also rests at it. QED. (I have closely followed the exposition of the argument in Bostock (1972/3: 42).) The problem here is that we need to think of the collection of times at which Achilles has left the point as an open interval; in that case, there need be no interval between the time in question and all the times which are later than it. Plainly enough, Aristotle's argument is a close cousin of Leftow's – both arguments depend upon not taking the notion of continuity seriously enough.

Since it adds nothing to Leftow's case for God's timelessness to insist that, as a matter of physical necessity, no parcel of matter follows a discontinuous spatial path, there is no reason why he should not just drop attempts to argue for this claim; if he still wishes to defend it, then he needs to find a completely different line of support.

5.3.2 Time and disquotational truth

At p. 50 Leftow begins his discussion of 'the logic of eternity' with the suggestion that he needs to – and that he can – defend the consistency of the following principle:

> (T) 'God exists' is true, and yet for any t, 'God exists at t' is false.

Given the disquotational properties of the truth predicate, there seems to be an immediate difficulty with the suggestion that (T) is defensible. After all, it is clear that if (T) is defensible, then so is the following principle:

> (T') At any time t, 'God exists' is true, and 'God exists at t' is false.

But if at any time t, 'God exists' is true, then, by the disquotational properties of the truth predicate, at any time t, God exists – and hence, by what seems like a very small step, God exists at t for any time t. But then, using the disquotational properties of the truth predicate again, we have that, for any time t, 'God exists at t' is true. And so, just using the disquotational properties of the truth predicate (and the very small step) we can

derive from (T') the contradiction that 'God exists at t' is both true and false.

There is not much to object to here. One might claim that, even though 'God exists' is true, there is no time at which 'God exists' is true. But that seems desperate. From my point of view, here and now, there is no difference between the class of English sentences that are true, and the class of English sentences that are true now. If 'God exists' does not belong to the class of English sentences that are true now, then God does not exist. (Think how strange it would be to insist that the sentences of English expressing truths of mathematics do not belong to the class of English sentences that express truths now just because – we may suppose – the truth-makers for these claims are not entities that exist in actual space-time. The truths of mathematics always have been, are and always will be true even if they are not made true by entities belonging to the actual spatiotemporal manifold.) Since objecting to the disquotational properties of the truth predicate seems even worse, this only leaves the very small step. But how could one hope to argue that, say, 'At t, God exists' and 'God exists at t' are not merely trivial variants of the same claim?

Of course, there is an important distinction to be made here, between sentences whose truth-makers are denizens of actual space-time, and sentences whose truth-makers are not denizens of actual space-time. Moreover, we could decide, say, that 'At t, p' is true provided that 'p' is made true by some truth-maker or other (regardless of whether that truth-maker belongs to actual space-time), but that 'p at t' is only true if 'p' is made true by a truth-maker which belongs to actual space-time. Under this decision, (T) and (T') are both consistent – and, in the case that there is a timeless God, both will turn out to be true. However, this decision is certainly not supported by ordinary usage, and it leads us to say things that sound very strange indeed. Surely a better suggestion is either to introduce some new terminology – perhaps we could insist on a distinction between what is true *at* a time and what is true *of* a time (the latter being the one which requires truth-makers belonging to actual space-time) – or else simply insist that, in the current context, there are suitable qualifying tags for all claims about truths about times where there might be confusion. ('2 + 2 = 4 is true now, but not in virtue of anything which belongs to the actual spatio-temporal manifold.' 'God exists now, but not in virtue of his belonging to the actual spatio-temporal manifold'. And so on.)

Given that what Leftow needs is a language in which he can talk sensibly about a timeless God, there is clear reason to make use of the kinds

of qualifying tags mentioned above (since these spell out exactly what is at issue). On the other hand, it is quite unclear how anything other than a love of obscurity and the sound of apparent paradox could lead one to embrace the suggestion that you need to show how it can be that some sentences are true but not true at any times. Since the intuition is that some sentences are true, but they are not made true by what happens in time, why not just speak plainly and call a spade a spade?

5.3.3 Partless extension

At pp. 137ff. Leftow offers two analogies and two arguments on behalf of the claim that there could be a partless extension (or, any rate, that it is possible to make sense of the idea of a partless extension). It seems to me that the notion of partless extension is simply incoherent, and hence that the analogies and arguments which Leftow offers are no good. I shall begin by offering an argument for the incoherence of the notion of partless extension.

The notion of extension is (roughly) correlative with the notion of measure: the volumes of extended things are measurable. It may be that the volumes of some extended things have measure zero – i.e. it may be that it is not just points (partless things) which have measure zero – but we can certainly say that things which have volumes with non-zero measure are extended. Moreover, it is simply an analytic consequence of measure theory that volumes with non-zero measure have volumes with non-zero measure as proper parts. And so it follows immediately that the notion of partless extension – i.e. of a volume with non-zero measure which has no volumes with non-zero measure as proper parts – is simply incoherent. (This argument is a little bit quick; it ignores certain complications caused by the fact that there are non-measurable volumes. However, I do not think that we need to worry about these complications here. The argument also ignores the case of extended things the volume of which has measure zero – but it is clear that exactly the same considerations apply in this case.)

Leftow's first analogy (pp. 137ff.) involves a 'necessarily immutable atom' which 'necessarily occupies a particular volume of space'. He suggests that, in this case, the atom is clearly extended, and yet the volume that it occupies is indivisible and hence partless. However, it seems to me that this argument illegitimately conflates the properties of the atom with the properties of the volume that it occupies. Even if we can make sense of the idea that an object might necessarily occupy a particular volume

of space – perhaps all universes have to be spherical, and they have to have a 'God atom' at the centre – it is just a mistake to suppose that such an occupied volume of space is indivisible because the thing which occupies it is. As I suggested above, it is analytic that a volume with non-zero measure has parts, even if it happens that the volume is occupied by an entity which is physically (or metaphysically) indivisible. Moreover, this objection does not depend upon adopting a substantivalist conception of space-time – even on relationalist accounts of space-time, it can be true that a physically or metaphysically indivisible entity has spatio-temporal parts.

Leftow's second analogy (pp. 140ff.) involves the notion of a 'chronon' – a unit of time than which there can be none smaller. He suggests that 'chronons' as typically conceived are not instants: they are characteristically supposed to have some very small duration (perhaps about 10^{-24} seconds). Consequently he claims that the 'chronon' is an example of the consistent conception of a partless extension. I do not think that this can be right. If there are 'chronons', then time is discrete, and the 'chronon' provides the natural unit of time: 1 second is equal to about 10^{24} 'chronons'. However, under this discrete measure, it is not true that an entity with 'volume' measure 1 has parts – the 'chronon' is not extended and it is partless. It is only if one incoherently combines elements of our distinct (and disjoint) conceptions of discrete and continuous measures that one can arrive at the idea of an extended temporal atom.

Leftow's first argument (pp. 142f.) on behalf of the notion of partless extension attempts to establish that eternity cannot have parts (since, within eternity, nothing can overlap anything else). However, this argument does nothing at all to advance the cause of partless extension unless it can also be established that eternity is extended. Leftow suggests that since God has experiences in eternity, eternity must be extended – but that suggestion relies on the assumption that experiences require extension, and, at the very least, that is an assumption which requires further justification. (There is also the threat that any justification which could be required would also establish that experiences have parts – indeed, if my earlier argument is any good, that is bound to be the case.)

Leftow's second argument (pp. 143f.) on behalf of the notion of partless extension takes off from some observations about the concept of 'the specious present'. According to Leftow, 'we seem to experience a duration all of which is present'. Moreover, 'there may be … an atomic length of human experiences such that no human experience can be shorter'. Given that these ideas are coherent, 'perhaps we can conceive of an

eternal specious present as a necessarily unique, atomic-length, sole eternally enduring thing that exhausts eternal duration'. But if 'the eternal specious present' is 'atomic-length', then we must be supposing that we have a discrete metric, and hence we must be supposing that 'the eternal specious present' has no duration. So the adduced observations about 'the specious present' can lend no support to the conclusion which Leftow wishes to establish. Moreover, the data on which Leftow is relying seem to me to be doubtful. I do not think that we seem to experience a duration all of which is present; rather – if I can put it like this – we seem to experience elapsing durations. When I see something in motion, it isn't that I seem to see it *here* and *there* all at once, even if I do seem to directly experience its motion. That is, 'the specious present' seems to have parts that are given in experience (even in what we are naturally inclined to call 'a single experience'). And, even if this is denied, there is at least room for suspicion that Leftow's suggestion trades on a confusion between (1) the 'experienced' time of a 'specious present' (how much time it seems to occupy to the subject of the experience); and (2) the 'external' time which is occupied by an experience (how much time the experience actually occupies).[4]

I think that it is just a mistake to suppose that eternity must have a 'partless duration'. Either eternity has duration, in which case it is not partless, or else it has neither duration nor temporal parts. Both possibilities are defensible, but it is no part of my current brief to try to defend either of them here.

5.3.4 Spatial contiguity

One of the most controversial aspects of Leftow's book is his treatment of spatial contiguity. At p. 190 and p. 225 he offers the following definition of spatial contiguity (I have amended the definition slightly to remove some logical difficulties):

> (SC) For any x which has or is a location in space and any y, x and y are spatially contiguous just in case there is no space between x and y.

At pp. 222ff. Leftow uses this definition to establish what he calls the Zero Thesis:

> (ZT) The distance between God and every spatial creature is zero.

[4] There are, of course, many difficulties with the idea that we can assign 'external' measures to experiences – cf. the critique of 'the Cartesian Theatre' in Dennett (1991).

This thesis seems attractive because it can serve as a premise in an argument for the omnipresence of God; indeed, according to Leftow it seems to offer the only possible literal understanding of the omnipresence of a non-spatial God. (John Earman seems to agree. See Earman (1995) Chapter 7, n. 9 and the paragraph to which this note is attached.)

According to the standard definition of a distance function (or metric), we have that, for any points x and y, d(x,y) = 0 iff x = y. There are various options for extending this definition to give distances between entities larger than points; we need not worry about the details of these options here. However, the crucial point to note is that it is built into the foundations of measure theory that distance relations only hold between entities that belong to a single metric space. Moreover, the reason why this assumption is built into the foundations of measure theory is because it is one of the most fundamental common-sense assumptions about distances – if you are talking about relations between entities which do not belong to a single metric space, then you cannot be talking about distance relations. (How far is it from red to yellow? Is cleanliness next to godliness? Which is the nearest possible fat man in that doorway?) Consequently, it is simply analytic that two entities can only be (spatially) contiguous if they belong to a single metric space.

Leftow acknowledges that his account of spatial contiguity appears to be in conflict with common sense, but he claims that this appearance may be generated by a confusion: 'the Zero Thesis is problematic only if a zero distance is a positive distance. But a distance of zero is just an absence of positive distance' (p. 225). That is not right, at least according to common-sense and standard mathematics. Look again at the highlighted feature of the familiar definition of a distance function: for any x and y, d(x,y) = 0 iff x = y, which entails that for any x, d(x, x) = 0. There is a single notion here – 'being at a given distance from' – which applies in just the same sense in degenerate and non-degenerate cases. Common sense agrees that to be at zero distance from something is to fail to be at some non-zero distance from that thing – but this does nothing at all towards establishing that to fail to be at some non-zero distance from a thing is to be at zero distance from it (because of the requirement that things which stand in distance relations must belong to a single metric space).

Perhaps Leftow might reply that there is nothing to stop him from indulging in a bit of linguistic reform: why should we not henceforth insist that everything that is 'outside' space-time is at zero distance from everything which is 'inside' space-time? Of course, this insistence will have other counter-intuitive consequences – distance functions ordinarily

obey a triangle inequality which will entail that all things which are 'outside' space-time are at zero distance from each other unless we put further restrictions on our definition – but we could no doubt learn to live with this. However, the crucial question is: why bother? How does it advance our understanding of *anything* to indulge in this bit of linguistic reform? Since it is clear that this 'literal' understanding of the notion of omnipresence has nothing at all to do with traditional understandings of that notion, the most that this manoeuvre can achieve is to preserve the *letter* of traditional doctrine. But surely it would not be worth needlessly complicating fundamental mathematical theories in order to do that. Would it not be better simply to say that God's omnipresence is to be understood in terms of the fact that all space-time points are 'present' to God? Will traditional theists not be obliged to say something like this, in order to avoid falling into pantheism?

(There are other places where Leftow seems to have problems with 'degenerate' relations. For example, at p. 289 he claims that if a relational theory of time holds true in a one-state universe, then 'there is literally no time at which [the single event] occurs'. But that is absurd: in this degenerate relational theory, there is a single instant at which the sole event occurs – we might identify that instant with the set which contains that event, as is done in some relational theories, or we might proceed in any of a number of other familiar ways.)

5.3.5 Concluding remarks

The above discussion does not come close to exhausting the places where I would want to dissent from Leftow's arguments. Perhaps I can mention two more that are particularly important. At p. 288 Leftow argues that since every achieving of understanding could be a first event in a universe, and every achieving of understanding could be a last event in a universe, it follows that it is possible that there be an achieving of understanding which is both a first and a last event in a universe. This argument is plainly invalid: I could be the only person in the universe, or I could be one of thousands – but it is not possible that I am both the only person in the universe and also one of thousands. At p. 258 Leftow argues against Lewis' analysis of 'might'-counterfactuals in terms of 'would'-counterfactuals: 'Tomorrow I will walk through my front door. I may then turn right and I may then turn left. But though I may do either, there is just one that I will do – say, turn left. Suppose now that a slightly different future were going to come about instead, one in which I do not leave the house at all tomorrow. It

would then be the case that had the world been slightly different and had I been going to go out tomorrow, I might have turned right and I might have turned left, and in fact I would have turned left.' This argument is unpersuasive: for there is no reason at all to suppose that our world is a near-neighbour *from the standpoint of* nearby worlds. Who knows what counterfactuals will be true in that slightly different future in which I do not leave the house tomorrow. In particular, given that I am free to go left and free to go right, why won't it be that there are equally close alternatives in which I go left and in which I go right, so that there is nothing which I *would* do were I to leave the house? Moreover, there are numerous other controversial doctrines on which Leftow insists, but of which I want no part, for example the doctrine that there are degrees of existence. (Surely it would be better to say that there are degrees of perfection amongst things, and leave it at that.) I cannot hope to discuss everything here.

However, all of this disagreement should not be taken to be an argument against the worth of Leftow's book. The historical discussions in the book are very illuminating, and a large part of the case for God's timelessness is very well made. There are various reasons why one might one to say that God is timeless, and Leftow has a good discussion of many of them. (We shall return to these considerations later.)

Nonetheless, there is a general point of criticism that seems worth making. If it is really true that an understanding of God's timelessness requires so many bizarre doctrines – degrees of existence, partless extension, the Zero Thesis, Principle T and so on – then the upshot is likely to be a *reductio* of the claim that God is timeless, and perhaps also one horn of an argument by dilemma against the existence of God. (Either God is timeless or God is not timeless …) For this reason, it seems to me that theists ought to look favourably on attempts to explain how God could be timeless which do not invest in these doctrines.

5.4 Craig

Craig (1979) provides two accounts of the way in which God might be related to time. On the one hand, on a 'substantivalist' account of time, 'God exists in absolute time changelessly and independently prior to creation and … creation marks the first event in time.' On the other hand, on a 'relationalist' account of time, 'God is timeless prior to creation and in time subsequent to creation, having willed the creation from eternity.' There are hard questions that can be asked about both of these accounts of God's relationship to time.

5.4.1 A timeless God

The hard questions that arise in connection with the 'relationist' view concern (1) the sense in which God is supposed to be timeless *prior to* creation; and (2) how we are supposed to conceive of the domain in which God is said to exist *timelessly* prior to creation.

Given that God is supposed to be timeless prior to creation, it cannot be that God is timeless *temporally prior* to creation. If we think about the creation in terms of cause and effect, then the cause is some activity on God's part, and the effect is the coming into existence of the creation (including *our* universe). Since time is supposed only to commence with the effect, the cause and the causing are not in time. So, in the nature of the case, the cause and the causing are not *temporally* prior to the effect in this case.

A natural suggestion, I think, is that God is timeless *causally prior* to creation. Indeed, one might think that this suggestion is not merely natural but mandatory. After all, in saying that God is the cause of creation we are *ipso facto* committing ourselves to the claim that God is causally prior to creation. However, if God is timeless causally prior to creation, and if God's bringing creation into existence is the *first* causal event, then it is quite unclear what it could mean to say that 'at creation, which God has willed from eternity to appear temporally, time begins' (p. 152). Given that the causing of the existence of creation is the first causing, and given that coming into existence of the creation is the first time, what can it mean to say that God has been willing something *from eternity*? 'From' has two senses, one of which presupposes a background metric – 'at a distance', 'since' – and the other of which is essentially causal – 'out of', 'because of'. While it is pretty clearly the former sense that is intended here, it is worth noting that *neither* sense can be in play in the present context.

From the relationalist standpoint, it seems that we ought to suppose that there is simply *nothing* to say about God's status prior to God's causing of the existence of his creation. Since God exists alone, and since there are no causal processes going on in God, or otherwise involving God, there isn't anything that creates a relational framework within which it makes sense to predicate metrical or topological properties of God (or of an arena in which God exists). God is simply the absolute origin of both causal and temporal reality.

This suggestion is perhaps more radical than it initially appears. When theists say that God has 'existed from all eternity', it is natural to hear them as saying that for each eternal state of God there is an *earlier* eternal

state of God. (This seems to be implicit in the use of the word 'from' in this context.) But, on the proposal before us, there is *nothing* prior to God's initial causal state: God's initial causal state is simply all there is to the initial state of reality (and God is the only thing that exists in that initial state).

Of course, given his rejection of actual infinities, Craig could *not* himself accept the proposal that, for each eternal state of God, there is an earlier eternal state of God. If there are metrical properties to be attributed to eternity – or, indeed, if there is any kind of succession that can be attributed to eternity – then, by Craig's lights, eternity must have an absolute beginning. But if eternity must have an absolute beginning, then there is only gain in supposing that God's initial causal state marks that absolute beginning. If, on the other hand, there are no metrical properties to be attributed to eternity – and if there is no kind of succession of any kind to be attributed to eternity – then we have no grounds at all for employing any kind of language which presupposes either that eternity does have metrical properties or that there is some kind of succession in eternity. And in this case, too, there is only gain in supposing that God's initial causal state marks the absolute beginning of reality.

5.4.2 *A temporal God*

There are various hard questions that arise in connection with the substantivalist view. Craig claims that the substantivalist can say that 'there is an undifferentiated, measureless, infinite time that elapses before the first event' (p. 172, n. 170). But this is to attribute incoherence to the substantivalist. On the one hand, to say that eternity is 'measureless' is to say that it does not support a measure. However, to say that eternity 'elapses' is to say that there is a kind of succession that can be attributed to eternity: eternity may be undifferentiated, but it consists of one 'part' after another. On the other hand, to say that eternity is 'infinite' is precisely to say that the 'parts' that make up eternity are themselves measureable: to be 'infinite' is precisely to be such that the measure of one's parts diverges as more parts are taken into consideration. If our universe is infinite in spatial extent, it is nonetheless not true that space is measureless: on the contrary, finite volumes of space are measureable, and the measure of the spatial extent of the universe is simply 'greater than any finite measure'.

If eternity has infinite measure, then Leibniz has some hard questions for the substantivalist. Why did God wait for an infinite eternity before creation? What was he *doing* before he created? And how and why did he

choose to create at exactly the point in eternity at which he actually did choose to create? Theists with sympathy for principles of sufficient reason may well be moved to suppose that we are here presented with a *reductio* of the substantivalist position, on the assumption that eternity has infinite measure.

On the other hand, if eternity has finite measure, then it seems that eternity began to exist, and we run up against the difficulty that Craig is committed to the claim that anything that begins to exist has a cause of its beginning to exist. While I said above that there is only gain in supposing that God's initial causal state marks an absolute beginning, this is only so if one is prepared to accept that there are cases in which something begins to exist even though it has no cause of its beginning to exist.

The substantivalist view faces further objections. In particular, I think, it faces the difficulty that it appears inconsistent with dynamic conceptions of time of the kind that were introduced with Einstein's general theory of relativity. While, as I have mentioned elsewhere, it makes some kind of sense to suppose that there is an extension of the manifold of our universe through whatever genuine singularities there may be, I do not think that it makes any kind of sense to suppose that there is an extension of the *time* of our universe through whatever genuine singularities there may be. Given that the substantivalist is supposing that God exists in *our* time after creation even though God does not exist in the space-time of our universe, it seems to me that the substantivalist is relying on a discredited conception of the time and space-time of our universe. While – perhaps – we can make sense of a *different* time in the realm in which our initial singularity appeared, theists who think that God is *in* time should continue to think that God's time is that different time, rather than the time of *our* universe.

The difficulty that the substantivalist view faces in accommodating dynamic conceptions of time *may* be further exacerbated if we take seriously the idea that our universe is part of a wider multiverse. In particular, if we suppose that there is no single 'internal' time that is common to the various universes that make up the wider universe, then it seems that it would be entirely gratuitous to assume that God's time is the time of *our* universe: there is just no evident reason why we should think that, if there is a multiverse, *our* universe has a particularly privileged position within it.

5.4.3 Further comments

Given that we distinguish between temporal order and causal order, there are interesting questions to ask about the relationships that obtain

between these two orders. Craig (2010: 72) maintains that Oppy (2010) 'conflates' these two orders, despite my insistence that my focus is squarely upon causal order. Where Craig diagnoses conflation, I see substantive disagreement.

If we think of the causal order as an ordering over a manifold, then I take it that this causal ordering is universal: there is one causal ordering that applies to the entire manifold. However, while there is just one causal ordering that applies to the entire manifold, this causal ordering is merely a strict *partial* ordering: there are many pairs of 'points' of the causal ordering for which neither member of the pair is causally antecedent to the other. Furthermore, there is no metric that is generated from the causal ordering, and (consequently) there is no notion of 'simultaneity' that belongs to the causal order.

I take it that the temporal order is an ordering over the same manifold upon which the causal order is an ordering. However, unlike the causal ordering, the temporal ordering may well not be universal: it may be that the temporal ordering only applies to a proper part of the manifold. (Moreover, as noted above, it may be that there is more than one non-overlapping local temporal ordering. However, in the interests of simplicity, I shall proceed under the pretence that there is just one temporal ordering.) As in the case of the causal ordering, I think that the temporal ordering is merely a strict partial ordering: however, I recognise that there are some theorists who suppose that the temporal ordering is a strict *total* ordering. Of course, there is a metric that is generated from the temporal ordering, and there is a notion of 'simultaneity' that belongs to the temporal order. (Those theorists who suppose that the temporal ordering is a strict total ordering suppose that, for any pair of non-simultaneous 'points' in the temporal order, one is temporally antecedent to the other.)

I think that temporal order and causal order 'coincide' everywhere on the manifold that there is temporal order, in the following sense: whenever it is true that one 'point' is causally antecedent to a second 'point', then the first 'point' is also temporally antecedent to the second 'point'. However, as I noted initially, I think that there may be parts of the manifold in which there is causal order but no temporal order: in particular, there may be parts of the manifold in which there is insufficiently rich structure to support a temporal metric. (Some theorists – including Craig – suppose that there can be 'non-metrical' time. I demur; in my view, time is *essentially* metrical.) Consequently, Craig (2010: 73) is just mistaken when he attributes to me that view that 'states which are ordered under the causal relation are necessarily also ordered under the [temporal] relation'.

It is a consequence of my view that there is no 'simultaneous' causation. By contrast, Craig (2010: 72) claims that any causally ordered series of states could be simultaneous: 'States which form a circle under the causal relation, for example, need not require that time is cyclical, for the states may all obtain at once, rather like the four-intercalated flaps of a box top, each holding down another.' I think that there cannot be circles under either the causal or temporal relation; but if I thought that there could be, I would think that any circle in one of these relations *is* a circle in the other relation as well.

Given the way that I think of the relationship between the causal order and the temporal order, I could accommodate either a timeless or a temporal God, if I believed in God. For, however we think of God, God is a causal agent, and so part of the causal manifold. If there are parts of the causal manifold to which God belongs that have a sufficiently rich structure, then those parts of the manifold are temporal, and in those parts of the manifold, God is in time. However, if there are no parts of the manifold to which God belongs that have a sufficiently rich structure, then God is everywhere atemporal.

5.5 Swinburne

Swinburne has held a range of positions about the nature of God's relationship to time. In Swinburne (1965), he defended the view that God is timeless. However, in Swinburne (1977/1993: 217, n. 8), under the influence of Pike (1971), he repudiated this defence of the view that God is timeless; and in Swinburne (1993; 1994) he provided a defence of the view that God is temporal.

The defence of God's timelessness in Swinburne (1965) depends upon the fundamental assumption that the laws of nature form the framework, and not the content, of the changing universe. In particular, he claims: (1) that if the existence of the universe is to be explained as the outcome of God's creative activities, then God must be a 'timeless principle', on the model of a law of nature; and (2) that the principle laying down the continued existence of God must be intrinsic to God himself, whence it follows that God, like the laws of nature, must be outside of time.

Neither of these arguments seems very compelling. On the one hand, it seems to me to be unacceptable to suppose that laws and principles are causal agents: if we want God to be the cause of the existence of the universe, then we should not want God to be anything like a principle or a law. To be a causal agent, God must have causal powers: but laws

and principles are not the kinds of things that have causal powers. On the other hand, even if we grant that there must be a 'principle intrinsic to God that lays down his continued existence', it is quite unclear how it could follow from this that God must be timeless. Surely we can suppose that there is something about God's nature that ensures his continued existence without taking any stance on the question of God's relationship to time. No matter what we think about Pike's objections to a timeless God, we should agree with Swinburne that the considerations advanced in Swinburne (1965) are insufficient to settle the matter.

The defence of the view that God is temporal – in Swinburne (1993; 1994) – depends upon four fundamental assumptions: (1) that everything that happens does so over a period of time – there are no instantaneous events; (2) that time has a metric only if there are laws of nature, even though time has a topology independently of whether there are laws of nature; (3) that the past is that which is logically contingent and causally unaffectable, while the future is that which is logically contingent and causally affectable; and (4) that there are both essentially indexical and non-essentially indexical temporal truths.

While it is perhaps not entirely clear how the conclusion that God is temporal follows from these four assumptions, it is clear enough that the first two assumptions are too controversial to carry any serious argumentative burden. In particular, it must be noted that the first assumption simply rules out the possibility that there might be causal order in the absence of temporal order: but those who suppose that God is timeless are committed to the claim that there can be causal order in the absence of temporal order (or so it seems to me). Moreover, the second assumption fails to take seriously the thought that metric and topology might both be essential properties of the temporal order: if there cannot be non-metrical or non-topological time, then there is no room for speculation about the differential dependence of temporal metric and temporal topology on the laws of nature. Perhaps there is also some suspicion that attaches to the third assumption as well: if the past is that which is logically contingent and causally unaffectable, and the future is that which is logically contingent and causally affectable, then what is the present? Presumably it is logically contingent, but it would appear that it is neither causally affectable nor causally unaffectable.

In the end, I do not think that the case that Swinburne (1993; 1994) makes for a temporal God is any more compelling than the case that Swinburne (1965) makes for a timeless God. It is interesting that considerations about laws of nature play a role in both sets of arguments. For,

at least *prima facie*, it seems that considerations about laws of nature have no bearing on the question whether God is temporal or timeless. If God is the creator of the universe, then it is plausible that God establishes the laws of nature – i.e. the laws that describe the operations of the universe. But the question whether God is temporal or timeless bears on a wider domain of which the universe is taken to be merely a proper part: and the laws of nature cannot simply be assumed to have application to that wider domain.

5.6 Concluding observations

There are, of course, many other recent discussions of God's relationship to time. (See, for example, Braine (1988), Craig (2001), De Weese (2004), Ganssle (2001), Hasker (1988), Helm (1988), Padgett (1992), Rogers (1994; 2000), Wolterstorff (1982) and Yates (1990).) However, the brief – and perhaps unrepresentative – survey that has been presented here suffices to establish that there are fundamental questions in this discussion that have not yet been adequately pursued. In particular, far too much recent discussion fails to examine the relationship of temporal order to causal order, and hence fails to consider perhaps the most obvious ways in which God's relationship to time might be understood. Of course, I do not claim that my own views about the nature of the temporal and causal orders – and the relationships that hold between them – are *definitive*: but I do think that contemporary discussion of God's relationship to time would be advanced by consideration of the general family of views of this kind.

CHAPTER 6

Necessity

Many theists suppose that God exists necessarily – i.e. many theists suppose that it is impossible that God not exist. Moreover, many theists suppose that God exists of necessity in the widest sense: many theists suppose that it is *metaphysically* impossible that God not exist. Some theists go further and claim that it is *inconceivable* that God not exist or that it is *logically* impossible that God not exist – i.e. that the claim that God does not exist has as a logical consequence any absurdity of your choosing. These further claims are massively improbable on their face: in particular, there is abundant evidence that many people not only can conceive that God does not exist but in fact believe that God does not exist, and this evidence is itself at least *prima facie* evidence that there is no logical absurdity involved in denying that God exists. In any case, in this chapter, we shall be restricting our attention to the claim that it is metaphysically necessary that God exists.

Many theists suppose, not merely that God exists, but that God has a range of essential properties which – *a fortiori* – God also possesses of metaphysical necessity. In particular, many theists suppose that the divine attributes that are presently under discussion are all essential to God, and hence all such that God possesses them of metaphysical necessity. By the lights of these theists, God is necessarily infinite, necessarily perfect, necessarily simple, necessarily eternal, necessarily fundamental, necessarily incorporeal, necessarily omnipotent, necessarily omniscient, necessarily omnipresent, necessarily perfectly good, necessarily perfectly beautiful, necessarily personal, necessarily conscious, necessarily agential, and so forth.

Many theists – and a good many non-theists as well – suppose that there are things other than God that exist of metaphysical necessity. In particular, there are many theists who suppose that there are abstract objects – numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects,

properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects, and so forth – which exist, or, perhaps in some cases, subsist, of metaphysical necessity. Theists who suppose that there are abstract objects that exist of metaphysical necessity may suppose either that the existence of these objects is independent of God's existence, or they may suppose that the existence of these objects is somehow dependent upon God's will. We examine the pros and cons of these two options later in this chapter.

6.1 Some initial considerations

The topics explored in this initial section form a grab-bag. First, I discuss attempts to explain necessary existence in terms of something else: self-explanation, or self-existence, or the like. Second, I consider views about the range of the necessary and the possible, and about the theoretical desiderata that govern choice of such views: should we economise on possibilities, or necessities, or some overall balance between the two? Third, I canvas intuitions about contingency, and, in particular, intuitions about the alleged contingency of the existence of a causal order. Fourth, I very briefly examine reasons for and against the assumption that metaphysical modality should be treated as an ontological and ideological primitive.

6.1.1 Self-explanation and self-existence

If God exists of necessity is there any explanation that can be given of either God's existence or God's necessary existence? Perhaps one might think to say that God's existence is explained by his necessary existence: God exists because he must. However, it is not clear that this is a substantive explanation. True enough, God's existence is *entailed by* his necessary existence. But not all entailment relations are explanatory; and it might well be thought that this particular entailment relation is a case in point. Moreover, without an explanation of God's necessary existence, one might think that, even if we allow that the entailment is explanatory, we should also insist that it does not explain very much.

Are there further things that might be offered by way of explanation of God's necessary existence?

Some say that the existence of God is *self-explanatory* – and perhaps one might think that whatever is self-explanatory is bound to be necessary. But, even if the self-explanatory is necessary, this suggestion is no help,

since it is plain that nothing can be self-explanatory in the relevant sense. If a claim A were self-explanatory, then, clearly, the claim 'A because A' would be a perfectly kosher way of giving an explanation of A. But it is obvious that every substitution instance of 'A because A' is an explanatory solecism. In particular, it is obvious that 'God exists because God exists' is an explanatory solecism: anyone who claims that this is a good explanation simply does not understand what it takes to explain something. Of course, this is not to deny that there is an ordinary language use for the expression 'self-explanatory': to say that something is self-explanatory is to say that it is obvious, or easily understood, or readily comprehensible, or understandable without (further) explanation, or not in need of (further) explanation. But even if the existence of God were obvious, or easily understood, or readily comprehensible, or understandable without (further) explanation, or not in need of (further) explanation, none of this would be an *explanation* of God's necessary existence. And, in any case, it seems pretty clearly wrong to suppose that God's existence is obvious, or easily understood, or readily comprehensible, or understandable without (further) explanation, or not in need of (further) explanation.

Some say that God is *self-existent* – and perhaps one might think that whatever is self-existent is bound to be necessary. But whether the self-existent is necessary depends upon exactly what self-existence is taken to be. There are several distinct thoughts that are sometimes woven together in conceptions of self-existence. First, there is the thought that what is self-existent derives its existence from itself. Second, there is the thought that what is self-existent derives its existence from its own nature or essence. Third, there is the thought that what is self-existent does not derive its existence from anything else: what is self-existent has no cause, and is not dependent upon any external sustaining force. The first thought is evidently forlorn: 'A derives its existence from A' is no less evidently a formula for solecism than 'A because A'. If you tell me that 'God derives his existence from God', then I shall suppose that you simply do not understand what it takes to give a proper explanation of the source of the existence of something. The second thought is, at best, highly controversial. In order to accept it, you have to accept that the natures or essences of things are metaphysically prior to the things of which they are essences or natures – i.e. you have to accept that, in a proper metaphysical ordering, there are natures and essences before there are things that have those natures and essences – and you also have to accept that the natures or essences of things can be productive – i.e. you have to accept that things can derive their existence from their natures or essences. For myself, I believe neither

of these things. The third thought does not evidently yield a notion of self-existence strong enough to entail necessary existence. If the physical universe exists both contingently and uncaused, then it does not derive its existence from anything else, and it is not dependent upon any external sustaining force. In that case, the physical universe would count as self-existent, but, *ex hypothesi*, it would not be necessarily existent. Similarly, if – like Richard Swinburne – you suppose that God exists contingently and uncaused, then you will suppose that God does not derive his existence from anything else, and you will suppose that God is not dependent upon any external sustaining force, but, *ex hypothesi*, you will not suppose that God exists of necessity.

Some say – perhaps merely repeating the second of the three thoughts bound up in the conception of self-existence – that God's *essence includes existence*, and that this explains why God exists of necessity. I am not confident that the notion of inclusion that is appealed to here is susceptible of a fully satisfying explanation; perhaps, however, it is sufficient to replace 'includes' by 'entails'. (A property F entails a property G just in case, necessarily, for any x, if Fx then Gx.) Does God's essence entail existence? Well, do the essences of other creatures entail existence? You might think that they do. In particular, if you think of your essence as the collection of properties that you must possess if you exist, then, of course, existence is one of those properties. Of course, on this way of thinking about things, for contingent creatures it is not true that their essences entail necessary existence. But, even if we suppose that God's essence entails necessary existence, we plainly do not have the prospect of an explanation of God's necessary existence in view: for, of course, we only have reason to suppose that God's essence includes necessary existence insofar as we have reason to think that God exists of necessity.

I think that theists should suppose that if God exists of necessity, then God's necessary existence is brute, i.e. not susceptible of any further explanation. Here I side with Chalmers (2002) against Leftow (2012). I do not deny that theists can construct valid arguments with the conclusion that God exists of necessity; what I deny is that any such argument yields a genuine explanation of God's necessary existence (even if there is a necessarily existing God).

6.1.2 Metaphysical space

Here is a very sparse and very abstract theory of metaphysical space. Metaphysically possible worlds are either causal manifolds or else causal

manifolds plus a realm of abstract objects. The causal manifold in every possible world starts out the same way: either the causal manifold in every possible world has the very same origin, or the causal manifolds in every pair of possible worlds share an initial infinite history. Where two possible worlds have identical histories to a particular point and then diverge, the sole cause of this divergence is that objective chances fall differently in the two worlds. All causal manifolds 'follow' the same laws, though, on my preferred conception, laws are just encapsulations of causal powers, and hence do not 'govern'. Summarising the above, and putting it in slightly different terms: the causal manifold of every possible world shares an initial history with the causal manifold of the actual world, operates according to the same range of causal powers as the actual world and diverges from the actual world only as a result of the outworkings of objective chance.

There are many ways in which we can loosen up this account of metaphysical space. We might suppose that there are metaphysically possible worlds that are not causal manifolds. We might suppose that there are metaphysically possible worlds that share no initial history with the actual world. We might suppose that there are metaphysically possible worlds that 'follow' laws other than the laws that are followed in the actual world. We might suppose that there are metaphysically possible worlds in which there are causal powers that are not amongst the causal powers that operate in the actual world. We might suppose that there are ways in which worlds that have hitherto had identical histories can diverge that do not depend upon the differential falling of objective chances.

As we 'loosen up' our account of metaphysical space, we gain possibilities and lose brute necessities. It is not clear which end of the spectrum is favoured by considerations of ontological and ideological economy: after all, what we gain in economy on possibilities we lose in economy on brute necessities, and vice versa. Some theorists suppose that we should not be economical with possibilities: whatever is conceivable is possible, and the bounds of conceivability are very wide. Other theorists contend that only a conflation of ontological and epistemological considerations could lead one to suppose that whatever is conceivable is metaphysically possible: we should always seek to minimise ontological (and ideological) commitments, and, in particular, we should seek to do so in the case at hand.

Theists disagree about the contours of metaphysical space. Some theists think that, in every possible world, there is a causal manifold; other theists think that there is at least one possible world in which there is no causal manifold (i.e. there is at least one possible world in which God does

not create anything, and so in which there are no causings). Some theists think that, in every possible world, the causal manifold begins from the very same origin: in every possible world, God has the same initial beliefs, desires, intentions, preferences, and so forth – and any differences between worlds that emerge do so as the result of the outplaying of objective chances (libertarian free decisions and the like). Other theists think that the causal manifold begins from a different origin in different possible worlds: God's initial beliefs, desires, intentions, preferences and so forth vary brutely across possible worlds. And yet other theists suppose that there are worlds in which there is a causal manifold but it has no origins: from all eternity, God has been involved in causal activity. Some theists think that the contours of metaphysical space are determined independent of God, i.e. independent of God's beliefs, desires, intentions, preferences, actions and so forth; other theists think that the very contours of metaphysical space are determined by God, and, in particular, by God's beliefs, desires, intentions, preferences, actions and so forth. Some theists think that metaphysical space is lush: there are many different possible causal manifolds that God could have initiated; other theists think that metaphysical space is sparse: in the extreme case, there is only one causal manifold that God could have initiated, the one that we have in our world.

There is a similar range of disagreement amongst naturalists about the contours of metaphysical space. Of course, ignoring considerations about abstracta, some naturalists can identify possible worlds with possible causal manifolds; but other naturalists suppose that there is a possible world in which there is no causal manifold. Some naturalists suppose that every possible causal manifold begins with the very same origin: as it were, every possible world begins with the same 'initial singularity' possessed of the very same properties. Other naturalists suppose that different possible causal manifolds begin from the same initial singularity, but that initial singularity possesses different properties in different possible worlds. And yet other naturalists suppose that there are causal manifolds that either have no origins (because they regress infinitely) or have origins other than the initial singularity. Some naturalists suppose that the laws and basic causal powers are necessary; other naturalists suppose that these laws and powers vary across possible worlds. Some naturalists suppose that chance is ubiquitous; other naturalists suppose that all chances are trivial. And so on.

When we think about things from this very abstract perspective, we see that, for almost any hypothesis about the contours of metaphysical space, there are theistic and naturalistic versions of that hypothesis. As I have

argued elsewhere, this fact has serious consequences for the prospects of cosmological arguments for theism. (See Oppy (2013).) Moreover, even setting aside considerations about cosmological arguments, we see that one can take theistic and naturalistic theories to have a common general structure: one can think, for example, that the best versions of these theories have in common the assumption that the causal manifold of every possible world shares an initial history with the causal manifold of the actual world, operates according to the same range of causal powers as the actual world, and diverges from the actual world only as a result of the outworkings of objective chance. Of course, it also might be that, even at this level of generality, theistic and naturalistic theories do *not* have a common general structure: perhaps, for example, while the best naturalistic theories have it that the causal manifold of every possible world shares an initial history with the causal manifold of the actual world, operates according to the same range of causal powers as the actual world, and diverges from the actual world only as a result of the outworkings of objective chance, the best theistic theories allow that there is brute variation in the initial causal state (because there is brute variation in the initial beliefs, desires, intentions, preferences and so forth that are possessed by the necessarily existing God).

6.1.3 Contingency

Consider the claim that the causal order – thought of as a network of causings – is contingent, because it could have been that God did not create anything.

Some theists believe that this is so: God made a libertarian free choice to engage in creative activity and – by the principle of alternative possibilities – this entails that it is possible that God not create.

Other theists deny this: on their view, while it may be that God had a libertarian free choice about what to create, it was not possible for God not to create anything. While, on the one hand, it might appear that there is a tension between the claim that God is omnipotent and the claim that it was not possible for God not to create anything, on the other hand, it might appear that there is a tension between the claim that it is essential to God's nature that God desires to have things upon which it is proper to bestow grace and the claim that it is possible for God not to create anything at all.

While it is not universally agreed among theists that it is a contingent matter that there is a causal order, and, hence, that everything that belongs

to our part of the causal order – i.e. our universe, and everything that belongs to it – is contingent, it is nonetheless true that there are many theists who do suppose that our universe, and everything contained within it, is contingent.

There are several kinds of considerations that might be advanced in favour of the view that our universe, and everything contained within it, is contingent.

First, it might be noted that there is a widespread belief that our universe, and everything that is contained within it, is contingent. Many theistic philosophers will claim that they 'share the intuition' that our universe, and everything that is contained within it, is contingent. In my view, neither the belief nor the 'intuition' is independent of the further beliefs or 'intuitions' that God created our universe and everything that is contained in it, and that God might not have created our universe and everything that is contained in it. *Of course*, those who suppose both that God created our universe, and that God might not have created our universe, also suppose that our universe is contingent. But those who accept that claim that God created our universe and reject that claim that God might not have created our universe do not suppose that our universe is contingent. And, amongst those who do not accept the claim that God created our universe, there is, I think, no widespread enthusiasm for the claim that our universe is contingent. Certainly, on the sparse conception of metaphysical space that I favour, it is quite clear that the existence of our universe is not contingent.

Second, it might be noted that it plainly seems to be *conceivable* that our universe, and everything that is contained within it, not exist. Given that it is conceivable that there be no global causal order, or that God makes an entirely different kind of global causal order, do we not have at least some evidence that it is possible that our universe and everything that is contained within it not exist? Not necessarily. If we suppose that there is a fairly tight connection between conceivability and possibility, then we may think that the conceivability of the non-existence of our universe is at least some evidence that our universe is contingent. But if we deny that there is this kind of tight connection between conceivability and possibility – and, in particular, if we think that there is some kind of conflation of metaphysical and doxastic considerations required in order to generate the belief that there is a tight connection between conceivability and possibility – then we may well deny that the conceivability of the non-existence of our universe is any kind of evidence that our universe is contingent.

Third, it might be noted that everything within the universe with which we have come into contact is, at the very least, something that has a finite lifespan: even protons, and neutrons, and black holes will eventually decay. There are several ways in which one might try to parlay this observation into a reason for thinking that the universe itself is contingent, but none that is in the least bit compelling. If chance is ubiquitous, then contingency is also ubiquitous. But neither an inference from parts to whole nor an induction over observed parts has much to recommend it: when we think about these matters from the proper global theoretical perspective, we see clearly that one of the major competing views is that the universe is not contingent even though all of the things contained within it are contingent. That view is untouched by an inference from parts to whole, or by an induction over observed parts, so long as it has sufficient support from other quarters.

Of course, nothing that I have said here counts as an argument in favour of the claim that our universe is not contingent. I am inclined to think that, when all relevant considerations are taken into account, the most virtuous global theories adopt a sparse conception of metaphysical space, and so end up committed to the claim that our universe is necessary – but I shall not try to press this matter here.

6.1.4 Origins of metaphysical modality

It is, I think, natural and attractive to think of metaphysical modality as an ontological and ideological primitive or surd. On the one hand, I think, it is not plausible to suppose that there is a conceptual analysis of metaphysical modality in terms of more fundamental notions. True enough, it seems that we can translate backwards and forwards between talk that employs modal idioms and talk of possible worlds: but I do not think that it is plausible to suppose that there is a satisfying conceptual analysis of metaphysical modality in terms of possible worlds. On the other hand, I think, it is also not plausible to suppose that metaphysical modality is a merely supervenient, or emergent, or constituted, or 'produced' feature of reality: if it really is the case that reality is marked by metaphysical modality, then metaphysical modality is ontologically fundamental.

Although it is natural and attractive to think of metaphysical modality as an ontological and ideological primitive or surd, it is also natural and attractive to suppose that metaphysical modality is a feature of the actual world: the ways that things could be and must be are 'built into' the ways that things are. If there is a causing, then – on my account – the causal

powers that are active in that causing support a chance distribution over possible outcomes. Of course – as I have noted elsewhere – there may be trivial chance distributions and hence causings in which the causal powers active in that causing can only give rise to one particular effect. But, from the widest perspective, the global causal order is a network of relata with causal powers supporting chance distributions over possible outcomes.

It is hard to see how one could reject anti-realism – eliminativism, fictionalism, quasi-realism, projectivism and the like – concerning metaphysical modality, and yet go on to insist that metaphysical modality is all merely a supervenient, or emergent, or constituted, or 'produced' feature of reality. Moreover, if one were to take the view that, while most metaphysical modality is a merely supervenient, or emergent, or constituted, or 'produced' feature of reality, there is a small 'core' of metaphysical modality that is ontologically and ideologically primitive, one faces difficulties on two sides. On the one hand, one needs to be able to point to sufficiently weighty theoretical advantages obtained by introducing this 'bifurcation' into the theory of metaphysical modality; and, on the other hand, one needs to be able to provide a satisfying account of the supervenience, or emergence, or constitution, or production of all of that part of metaphysical modality that is held not to be ontologically and ideologically primitive.

6.2 Leftow

Leftow (2012) is a sustained attempt to argue that a great deal of metaphysical modality is neither ontological nor ideological surd: a great deal of metaphysical modality is not ontologically and ideologically primitive. In particular, according to Leftow, the bulk of metaphysical modality is 'dreamed up' by God. In what follows, I try to explain the motivation for Leftow's view, and the main elements of his account of metaphysical modality. I then consider a range of detailed objections to the position that Leftow develops.

6.2.1 An alleged problem for theistic belief

Leftow claims that modal truths present a challenge to the claim that God is the sole ultimate reality. In his view, this challenge is made apparent in the inconsistency of the following set of claims, all of which appear to be things that 'Western theists' have reason to believe:

(1) Some truths that are neither negative existential nor about God are absolutely necessary.
(2) Any truth that is absolutely necessary and not negative existential has an ontology.
(3) If a necessary truth not about God has an ontology, then all of that ontology lies outside of God, i.e. it is neither God nor a part or aspect or attribute of God.
(4) God causally explains the existence of everything other than God; before all else existed, God existed alone.

Putative examples of absolutely necessary truths that are neither negative existential nor about God include: that 2 + 2 = 4, that either it is raining or it is not raining, and that it is possible that there are quokkas. While there have been philosophers – for example Quine – who have challenged the claim that there are absolutely necessary truths that are not negative existential, I think that most philosophers will find at least some of these examples compelling. (The exclusion of 'negative existentials' raises some questions. Is the claim that water is H_2O negative existential? If it is logically equivalent to the claim that anything that is water is H_2O, and if that is in turn logically equivalent to the claim that there isn't anything that is both water and not H_2O, then it seems that the claim is logically equivalent to a negative existential. Is that sufficient to make it a negative existential?)

Leftow gives the following account of what it is for a truth to have an *ontology*:

> A proposition represents reality as being a certain way. By so doing, it lays down a condition. If reality meets this condition … the proposition is true … and its ontology is that of the world from which its truth derives – the items that together meet the condition. (23)

According to Leftow, to say that a truth has an ontology is not to say that it has a truth-maker, because to say that a truth has an ontology is not to commit to controversial truth-maker claims (see 24). However, as I see it, to say that a truth has an ontology is to commit to some kind of truth-maker theory, further details of which have not yet been supplied.

Leftow motivates the claim that absolutely necessary truths have ontologies by way of a thought experiment. Suppose that:

> Nothing at all exists, abstract or concrete. Even if there are statuses for non-existents to have … nothing has any such status. All domains philosophers have talked about – the abstract, the concrete, the existent, the non-existent-but-nonetheless-having attributes, and so on – are just empty. (24)

Because, under the conditions just described, it would not be the case that 2 + 2 = 4, it is clear, according to Leftow, that the claim that 2 + 2 = 4 has some ontology.

I find this pretty unpersuasive. On most accounts of metaphysical space – including those that Leftow and I accept – the scenario described in this thought experiment is not possible. Hence, on standard accounts of counterfactuals, there is no non-trivial claim to be made about what would be the case if the scenario described in the thought experiment obtained. In particular, while it is (trivially) true that, under the conditions described, it would not be the case that 2 + 2 = 4, it is also (trivially) true that, under the conditions described, it would be the case that 2 + 2 = 4.

Leftow claims – in his argument against deity theories in Chapter 8 – that the truths of conditionals with impossible antecedents can be overdetermined. Sometimes, he says, they are true not merely because their antecedents are impossible. Sometimes, he says, these overdetermining grounds of truth give us reason to believe them independent of their antecedents' modal status. I do not see how these claims could rescue his present argument. It is, of course, true that the truth of conditionals with impossible antecedents can be overdetermined: consider any conditional of the form *if A then A* in which A is absolutely impossible! But, if we are looking for 'overdetermining' considerations, then I do not see how we can go past this: those claims that are absolutely necessary are true no matter what, and hence are true even if nothing at all exists. In particular, 2 + 2 would equal 4 no matter what: 2 + 2 would equal 4 even if nothing at all existed. At the very least, those who suppose that necessary truths do not have ontology should be unmoved by Leftow's argument, as should those who are agnostic about this matter.

1–4 do not form an inconsistent set; but the addition of the further claim that *absolutely necessary truths hold at all points in the causal order* does lead to inconsistency. We begin with the assumption that there are points in the causal order at which God exists alone. If all absolutely necessary truths hold at all points in the causal order, then, in particular, all absolutely necessary truths hold at all points in the causal order at which God exists alone. However, if all absolutely necessary truths have ontologies, and if some absolutely necessary truths have ontologies that require more than the existence of God alone, then some absolutely necessary truths do not hold at all – or, indeed, any – points in the causal order at which God exists alone. Contradiction!

As a means of escaping from this contradiction, Leftow recommends giving up the claim that all absolutely necessary truths hold at all points

in the causal order. I think that one does better to give up the claim that absolutely necessary truths have (non-trivial) ontologies: absolutely necessary truths are simply true no matter what, and so are true independently of what there is. Be that as it may, we turn now to a closer examination of Leftow's positive account.

6.2.2 *Outline of Leftow's solution*

In order to reject the claim that all absolutely necessary truths hold at all points in the causal order, Leftow proposes that there is an initial part of the causal order at which no modal claims may be properly applied. In this early part of the causal order, God alone exists. While, at this point in the causal order, it is 'in' God to establish modal statuses, he has not yet done so; at this point in the causal order, nothing is possible and nothing is necessary. God then 'thinks up' or 'dreams up' states of affairs involving determinate entities other than God, and 'decides' whether those states of affairs are possible, or necessary, or impossible. What God 'thinks up' or 'dreams up' is not determined by God's nature; but once the 'thinking up' or 'dreaming up' is done, the parameters of the possible and the necessary are fixed, including the application of these parameters to God and to God's nature. After the fact, it can be said that it was necessary that God engage in this 'thinking up' or 'dreaming up' – but this can only be said because he *did* engage in that 'thinking up' or 'dreaming up'. After the fact, God and God's nature make it appropriate to say that God exists of necessity, and possesses various attributes essentially (and hence of necessity) – but there was no saying these kinds of things prior to the 'thinking up' or 'dreaming up' that God undertook in establishing modal statuses.

This initial sketch of Leftow's position is only roughly correct. In the course of setting out his account, Leftow makes free use of talk about propositions, states of affairs, possible worlds, concepts and the like. But, in the end, he is an eliminativist or fictionalist about all these kinds of entities: in the end, all talk of propositions, states of affairs, possible worlds, concepts and the like is supplanted by talk about divine causal powers. According to Leftow, what God *really does* when he establishes modal statuses is to grant himself a range of causal powers: *these* powers and no more. That God has granted himself *these* powers and no more, taken in combination with God and God's nature, provides an ontology for all modal claims, i.e. for all claims about what is possible, necessary and impossible.

The main focus of the coming discussion is on the interpretation of Leftow's use of the locution 'in God', and his related claims about the

'modal flatness' of dependence. However, before we turn to this, we need to make some preliminary observations about the connection between causal order and temporal order, to justify what might otherwise be taken to be a controversial aspect of my interpretation of Leftow's account of secular statuses.

6.2.3 Temporal order and causal order

Time and cause both involve partial orders: there is the temporal partial order and there is the causal partial order. It is controversial how far these partial orders coincide. Questions arise about 'backwards causation', 'simultaneous causation', 'time without cause' and 'cause without time'. Leftow says: 'Anything that earlier has a property and later lacks it is *ipso facto* in time' (177). I demur. We can discuss the causal order, and make perfectly good sense of 'earlier' and 'later' with respect to it, without worrying about exactly how causal order relates to temporal order. Moreover, we should avail ourselves of this option in the present context: for, while it is controversial whether, if God exists, God is temporal – or, at least, temporal subsequent to creation – it is not controversial whether, if God exists, God is causal. (On the assumption that our universe is all that there is, I think that there *is* a perfect coincidence between causal order and temporal order; but, on the further assumption that God exists and made our universe, I am inclined to deny that there is a perfect coincidence between causal order and temporal order. And, of course, in the present context, the assumption that our universe is all that there is must be set aside.)

When Leftow sets out the genesis of secular modal status as a sequence, I take it that he is setting out part of the causal order. In the causal order: (1) God exists wholly alone; and then (2) God thinks up states of affairs involving determinate non-deities; and then (3) God notes any good-making and bad-making features these states of affairs would have; and then (4) if these states of affairs would have good-making and bad-making features, God takes attitudes towards their obtaining; and then (5) God decides whether to prevent these states of affairs, either absolutely or conditionally; and then (6) God prevents states of affairs, and permits states of affairs, and also forms dispositions to prevent states of affairs and to permit states of affairs. *Thinking up*, and *noting*, and *taking attitudes towards*, and *deciding*, and *preventing*, and *permitting* are all causal activities. Leftow says: 'in this context being earlier only means being presupposed by what follows' (362). I demur. It is not just that the later states 'presuppose' the

earlier ones; it is also the case that the later states come after the earlier ones in the causal order.

Despite his occasional propensity to talk about 'presuppositions' and the like, there is plenty of further evidence that Leftow really does mean to be talking about location in the causal order. Consider, for example, his endorsement of the claim that God is directly or indirectly the source of all that is 'outside' God (GSA): for all x, if x is not God, or a part, or an aspect, or an attribute of God, then God makes the creating-*ex-nihilo* sort of causal contribution to x's existence as long as x exists (20 and 78). For any truth, the ontology of which is not supplied by God, or God's parts, or God's aspects, or God's attributes, *there is*, according to Leftow, ontology for which God *makes* the creating-*ex-nihilo* kind of *causal contribution*. Since, according to Leftow, neither God, nor God's parts, nor God's aspects, nor God's attributes provide the ontology of secular modal status, he is plainly committed to the claim that God makes the creating-*ex-nihilo* sort of causal contribution to the ontology of secular modal status, wherever there is secular modal status.

Consider, then, the global causal order – i.e. *our* global causal order, the one to which we all belong. As I see it, the most plausible metaphysical conjecture postulates a tight connection between causal powers, chance distributions and possibilities. At any point in our global causal order, there is a chance distribution over possible outcomes generated by the causal powers in play at that point. Moreover, all possibilities are possible outcomes of the outworking of objective chance at some point in our global causal order – every possible global causal order shares an initial history with our global causal order, and diverges from it only as a result of the outworkings of objective chance. Further, there is a range of basic powers that are always in play: the same basic powers are in play at all points in our global causal order, and at all points in all possible alternatives to our global causal order. (For the purposes of this chapter, I am simply agnostic on the question whether there are locally emergent – i.e. non-basic – causal powers; and I am also agnostic on the question whether there are – or could be – any non-trivial chance distributions.)

Even at this level of generality, Leftow's view about the global causal order is rather different from mine. Of course, where I think that our global causal order is an entirely *natural* causal order, Leftow thinks that our global causal order has an initial part that is entirely *supernatural* and some subsequent parts that are at least partly 'natural'. But Leftow also rejects the tight connections that I see between causal powers, chance distributions and possibilities. In particular, on his view, there is an initial

part of the causal order in which there are no possibilities – but for those for which God, and God's parts, and God's aspects, and God's attributes provide ontology – but in which the exercise of divine causal power generates a whole range of possibilities. (Leftow does not discuss chance distributions, but I assume that Leftow would say the same for them: there is an initial part of the causal order in which there are no chance distributions – save for those for which God, and God's parts, and God's aspects, and God's attributes provide ontology – but in which the exercise of divine causal power generates a whole range of such chance distributions.)

I find it irresistible to suppose that whatever happens at 'downstream' points in the causal order is at least possible at 'upstream' points in the causal order: if something happens at some point in the causal order, then that thing was at least *possible* at all earlier points in the causal order. Leftow disagrees. Consider an early part of the causal order, at which God has not yet 'dreamed up' any secular modal statuses. According to Leftow, at that early point of the causal order, all of the secular things that subsequently appear in the causal order are not so much as possibilities: even though I sit here typing this paper, at sufficiently early points in the global causal order it was not so much as possible that I should (eventually) do so.

6.2.4 What it is in God to do

Leftow has a special locution designed to facilitate talk about God's 'capacities' in that early part of the causal order in which God has not yet 'dreamed up' secular modal statuses. Leftow explains this special locution in a section of his book entitled 'What it is in God to do' (252–4). I think that it is worth paying close attention to what Leftow has to say in this section of his book.

The section begins with the observation that we sometimes make claims like this: 'I did not have it in me to disagree.' Leftow says that what one usually would mean by this claim is that one does not have the power or motivation to disagree: 'to have it in one to do something is usually to have the power and some motivation to do it' (252). That does not sound quite right to me. I think that there is a range of cases in which claims about what it is in one to do are claims about one's abilities; and I think that there is a range of cases in which claims about what it is in one to do are claims about one's motives; and I guess that that there is also a range of cases in which claims about what it is in one to do are claims about both ability and motivation. I might not have it in me to speak Finnish simply

because I have never learned a word of the language; or I might not have it in me to speak Finnish because, while I have a good grasp of the language, I have come to hate the sound of it; or I might not have it in me to speak Finnish because, although I am keen on learning to speak Finnish, I lack the intellectual capacity to master a second language; and so forth.

Leftow claims that there are three kinds of contexts in which he will make 'non-standard' use of claims of the form 'God has it in him to do A.'

First, he will say that God has it in him to do A if God has the power to do A. Second, he will say that God has it in him to do A if, while God does not have the power to do A, the only reason that God does not have the power to do A is that God has denied himself the power to do A. Third, he will say that God has it in him to do A if, while God does not have the power to do A, and God has not yet decided whether it shall be possible for him to do A, 'God is such that if he will to be able to do A, then he will be able to do A, it will be possible that he does A, and it will be possible that he brings it about that he does A' (253).

Leftow provides a 'definition of the locution in this technical sense' (252) as follows: God has it in him to do A $=_{df.}$ God is intrinsically such that (God wills to have the power to do A) $\supset$ (God has the power to do A). I think that, in this definition, the defining clause is meant to be read like this: *God is intrinsically such that: ((God wills to have the power to do A)* $\supset$ *(God has the power to do A))*. Since the conditional here is a material conditional, the defining clause is equivalent to the following: *God is intrinsically such that either God does not will to have the power to do A or God has the power to do A*.

Consider any action A. While it is not clear exactly what it means to say that God is *intrinsically such that* so-and-so, it seems that it should turn out to be the case that God is intrinsically omnipotent. But, given that God is intrinsically omnipotent, it seems that God is intrinsically such that, for any action A, either God does not will to have the power to do A, or God has the power to do A. Think about it this way. For any action A, either God has the power to do A, or God does not have the power to do A. If God does not have the power to do A, then, certainly, as a consequence of his omnipotence, God does not will to have the power to do A. So, either God has the power to do A, or God does not will to have the power to do A. But, if it is true that, for any action A, God is intrinsically such that either God has the power to do A, or God does not will to have the power to do A, then, by Leftow's definition, it follows that, for any action A, God has it in him to do A.

In constructing this argument, there were no constraints on A. A could be an impossible action. A could be an immoral action. A could be an irrational action. So it seems that it is a consequence of Leftow's definition that God has it in him to do impossible, and immoral, and irrational things.

Perhaps, though it seems unlikely, the defining clause is actually meant to be read like this: *If God is intrinsically such that God will to have the power to do A, then God has the power to do A.* But consider a case in which God does not have the power to do A. In that case, by the definition, it will be in God to do A just in case it is not the case that God is intrinsically such that God wills to have the power to do A. Assuming that it is not the case that God is intrinsically such that God wills to do impossible, and immoral, and irrational things, it again turns out that God has it in him to do impossible, and immoral, and irrational things.

I am pretty sure that Leftow does not mean for his 'technical sense' to allow that God has it in him to do impossible, and immoral, and irrational things. So I conclude that something has gone wrong with Leftow's definition. In understanding what he means by claims of the form 'God has it in him to do A', we shall need to fall back on his informal tripartite explanation of uses that he makes of expressions of this form. Since his first observation – that he will say that God has it in him to do A if God has the power to do A – simply conforms to the ordinary usage of expressions of the form 'x has it in him to do A', we need only consider his second and third observations.

In Leftow's second case, he observes that he will say that God has it in him to do A if, while God does not have the power to do A, the only reason that God does not have the power to do A is that God has denied himself the power to do A. Leftow illustrates the kind of case he has in mind with the following example:

> Suppose that God has the power to make items of just ten kinds. Then he does not have the power to make things of an eleventh kind. As I see it, the only reason he does not have it is that he has not thought up an eleventh kind and done certain other things consequent on that. By not doing so, he had denied himself the power to make things of an eleventh kind. This is the only reason he does not have it. So I also say that though there is no eleventh kind, God has it in him to make things of an eleventh kind. (252)

I do not find this example helpful. Certainly, in the case of human beings, there is a clear distinction between the possession of a power – ability, proficiency, capability, capacity – to do something, and the possession of a power to acquire the power to do something. It is one thing to have the

capacity to converse in Finnish; it is quite another thing merely to have the capacity to learn to converse in Finnish. But, in the case of an omnipotent being, it is not clear that there is a similarly clear distinction. In particular, given that God is omnipotent, God has the power to make items of as many kinds as he so chooses. Even if he has thus far only made items of ten kinds, his omnipotence surely guarantees that he does have the power to think up more kinds of things and to make things of those kinds as well. (Setting these considerations aside, there is also a threat of paradox in the proposition that an omnipotent being has the *power* to deny itself *powers*. However, I shall not attempt to pursue this line of thought here.)

In Leftow's third case, he observes that he will say that God has it in him to do A if, while God does not have the power to do A, and God has not yet decided whether it shall be possible for him to do A, 'God is such that if he will to be able to do A, then he will be able to do A, it will be possible that he does A, and it will be possible that he brings it about that he does A.' In particular, Leftow says that he has in mind a case in which God is considering whether to make it is possible that p, but has not yet decided whether to make it is possible that p.

Here, again, the case is not helpful. We are invited to consider a case in which God is deliberating about whether to make it possible that p. But how are we to conceive of the *deliberations* that God is supposed to be making when trying to decide whether to make it possible that p? If we imagine that we can represent the material of God's decision in a decision matrix, then it will look something like this:

	Outcome_1	…	Outcome_n
Make it possible that p	V_{11}	…	V_{1n}
Make it impossible that p	V_{21}	…	V_{2n}

But how are we to think about the outcome_i's? What could these be? In the standard case of human decision theory, the outcome_i's are required to be *possible* states of the world. But we are imagining a case in which there are no 'secular possibilities', i.e. no possibilities not fully determined by God's existence, parts, aspects and attributes. On its face, it is far from clear that we can make sense of the suggestion that God *decides* which secular things to make possible, since the very idea of rational decision presupposes that a choice is being made in the light of a range of *possible* ways that the world might be.

The conclusion that I wish to draw from this discussion is that the section titled 'What it is in God to do' does not succeed in explaining how

instances of the locution 'It is in God to do A' are to be understood. When we come to later passages in the book, such as this one:

> Whereas Platonists, and so on, will say that God thought as he did because he had to, I say that he had to only because he did. I add that his nature did not constrain his thinking. Rather, it was *in* him to think otherwise. This does not imply that he could have. It implies only that he does not and could not have the power to do so only because he did not will to have it. (496)

it is hard to escape the feeling that we have been led around a very small circle. Without an explanation of the locution that I have been discussing, there is no way of understanding what is being said here; but, in the end, the only explanation that we are offered of that locution seems to presuppose that we already understand what is being said in this kind of passage.

6.2.5 Necessity and dependence

Leftow defends a collection of controversial claims about necessity and dependence. In his view, real dependence – including causal dependence – is a 'modally flat' phenomenon: real dependence is 'being from', as instanced by effects 'being from' their causes. Moreover, in Leftow's view, there can be real dependence among necessary items: necessary states of affairs can 'come from', and so really depend upon, other (necessary) states of affairs. Furthermore, according to Leftow, there are cases of non-causal explanation that draw upon real dependences amongst necessary items, and there are cases of non-causal explanation that afford genuine explanations of necessary truths.

Against the objection that all genuine explanation is contrastive, Leftow offers a range of examples of what he takes to be genuine explanations of necessary truths. I shall suppose, for the purposes of examining his examples, that if we fit his examples to the mould 'A because B', a minimal condition on their counting as genuine explanations is that they should not be explanatory solecisms.

Example 1: It is true that God exists *because* God exists.
Example 2: {a, b} exists ⊃ {a} exists *because* sets have their members essentially and Meinongian possibilism is false.
Example 3: Socrates is mortal *because* Socrates is human and all humans are mortal.

'God exists because God exists' is a paradigmatic example of an explanatory solecism: someone who think that this is a genuine explanation

simply fails to understand what it is for something to be genuinely explanatory. Furthermore, it is both necessary and knowable *a priori* that God exists iff it is true that God exists. So, at the very least, there is a temptation to suppose that 'It is true that God exists because God exists' is also an explanatory solecism, on the grounds that substitution of expressions that are necessarily and *a priori* knowably equivalent cannot convert an explanatory solecism into a claim that is not an explanatory solecism. If we suppose that the relation of being genuinely explanatory is transitive, we can bolster these considerations by also observing that there seems to be no stronger reason to say that 'It is true that God exists because God exists' is genuinely explanatory than there is to say that 'God exists because it is true that God exists' is genuinely explanatory. But, of course, if the relation of being genuinely explanatory is transitive, then – on pain of commitment to explanatory solecism – it cannot be true both that the claim *that God exists because it is true that God exists* is genuinely explanatory, and that the claim *that it is true that God exists because God exists* is genuinely explanatory. Finally, although this is perhaps more controversial, one might think that similar arguments make it tempting to suppose that '"God exists" is true because God exists' is also an explanatory solecism.

On any standard account of set theory, we have that $\{a, b\} = \{a\} \cup \{b\}$, where a and b may be either sets or ur-elements. If we are happy to talk about the *existence* of sets, then it is immediate from this identity that {a, b} exists iff both of the sets {a} and {b} exist. Since our identity seems to be merely a matter of definition – we can treat this identity as a definition of *set union* – it seems that it is essentially a matter of definition that {a} exists if {a, b} exists. But, if it is essentially a matter of definition, then it cannot also be that there is a genuine explanation of the fact that {a} exists if {a, b} exists. Moreover, even if we supposed that, rather than being a matter of definition, our identity is something that has a derived status in an axiomatisation of set theory, it seems that it would be, at best, highly controversial to suppose that is it *genuinely* explained by its derivation from the axioms in that axiomatisation. As Russell noted long ago, the most significant burden in the justification of an axiomatisation of a mathematical theory is that the right results can be obtained from the axioms: in the case at hand, it would be a constraint on the acceptability of an axiomatisation of set theory that it delivered the identity in question. Moreover, it would not be a black mark against an axiomatisation of set theory if it were to take the identity in question as an axiom. But, if we were to take the identity as an axiom in our axiomatisation, then there

would be no non-trivial derivation of the identity within that axiomatisation (assuming, of course, that we have properly independent axioms).

It seems wrong to think that Socrates' mortality is to be genuinely explained in terms of the mortality of beings other than Socrates. If the gods had been so displeased with Socrates that they elevated all other human beings to immortality, while leaving Socrates as he was, Socrates would have remained mortal. If future generations discover ways of prolonging human life indefinitely and there are future human beings that do live forever, it will still be the case that Socrates was mortal. Of course, if we take seriously the idea that it is a necessary truth that Socrates is mortal, then we shall suppose that it is not possible that the gods elevate other human beings to immortality, and we shall suppose that it is not possible that future generations discover ways of prolonging human life indefinitely. Nonetheless, we might still think that a genuine explanation of Socrates' mortality ought to appeal only to considerations about Socrates: *his* constitution, *his* environment, and so forth. Leftow suggests that perhaps Socrates has mortality because Socrates has humanity and humanity contains mortality either as conjunct or as species (502), but this seems to me to be a paradigmatic case of *faux* explanation: after hearing Leftow's suggestion, I have gained no insight at all into the nature of *Socrates'* mortality; I have been told nothing more than that Socrates is mortal because everyone is, and I have been told nothing at all about what it is about human beings that makes *them* mortal.

Even if it is accepted that Leftow's examples fail to establish that there are genuine explanations of necessary truths, one might think that other examples can be offered in their place. Consider, again, the claim that Socrates is mortal, but this time in the context of the kind of global metaphysical theory that I endorse. It seems plausible, on that theory, that it is a necessary truth that Socrates is mortal: no matter how the chances play out, there is no possible world in which Socrates lives forever. Moreover, it seems plausible that, on that theory, there is an explanation of Socrates' mortality: for, on that theory, it is plausible that, on every possible history that the universe might have had, the universe has a never-ending future in which it is very cold, very dark and very empty. Since nothing like Socrates could exist in the very cold, very dark and very empty conditions that must eventually come to obtain, it must be that, if Socrates exists, he exists only for a finite span of time. Perhaps we can be more precise: Socrates is essentially constituted, in part, by protons; but protons must eventually decay; and it is impossible that, when all protons have decayed, Socrates continues to exist. Doubtless we could make an argument with

a smaller upper bound than the roughly 10^{40} years that it will take for all protons to decay; but this argument from large-scale physics is clearly sufficient for the purposes at hand.

In defence of the claim that there can be real dependence among necessary items – for example, necessary states of affairs that depend upon other necessary states of affairs – Leftow offers a range of cases. In particular, he claims that, since the existence of sets really depends upon the existence of the members of those sets, and the existence of wholes really depends upon the existence of the parts of those wholes, necessarily existing sets and necessarily existing wholes provide examples of cases in which there is real dependence between necessary existents.

> Example 4: The existence of {God} really depends upon the existence of God, but not vice versa.
>
> Example 5: Even if a red wall and its parts exist necessarily, the redness of the wall really depends upon the redness of the parts, and not vice versa.
>
> Example 6: The truth of a conjunction really depends upon the truth of its conjuncts, but not vice versa.

I find these examples entirely unpersuasive. In the case of sets, it is no more true that the set can exist in the absence of its members than it is that the members can exist in the absence of the set. It is no less – and no more – convincing to claim that the existence of God really depends upon the existence of {God}. Similarly, in the case of parts, it is no more true that that wall can be red when all of its parts are not red than it is that all of the parts can be red when the wall is not red. It is no less – and no more – convincing to claim that the redness of the parts of the wall really depends upon the redness of the wall. And, again, in the case of conjunction, it is no more true that the conjuncts can fail to be true when the conjunction is true than it is that the conjunction can fail to be true when the conjuncts are true. It is no less – and no more – convincing to claim that the truth of the conjuncts really depends upon the truth of the conjunction.

Even if it is accepted that Leftow fails to make a convincing defence of the claim that what is necessarily so need not be independent of everything else, one might think that there are other ways of making the case. Consider, again, the global metaphysical theory that I endorse. On that theory, there is a global causal order – a global order of real dependence – in which chance plays a significant role. But, in my sketch of that global metaphysical theory, I left it open that the chances might be trivial: and if *all* of the chances are trivial, then there is just one possible deterministic

universe. However, if there cannot be real dependence between necessary existents, then there cannot be any real dependencies in that one possible deterministic universe: if there can be no real dependence between necessary existents, then there are no causal relations in the one possible deterministic universe. I think that it is possible to live with this. In particular, I think that one can say that *either* there is just one possible universe in which there are no causal relations *or else* there are many possible universes in which chances and causal relations are ubiquitous.

In my view, the most controversial of Leftow's claims about real dependence is his claim that real dependence – including causal dependence – is 'modally flat'. Leftow offers little by way of defence of this claim: he *says* that it might help explain the persuasiveness of transfer-based theories of physical causation, and that it has positive consequences for Frankfurt-style cases concerning alternative possibilities and freedom. Beyond this, he is most concerned to explain why causal claims often support counterfactuals even though counterfactual dependence is actually epiphenomenal.

Leftow also offers little by way of development of his theory of causation. He says that causes are producers, sources of a particular kind. He adds that if e causes e*, then e* depends upon e because e* comes from e, because e is its source. He adds that it is because causes are sources that causal claims often support counterfactuals:

> If the fire's burning causes the kettle's heating and the situation is simple – no failsafes, no redundant causation, and so on – then had the fire not burned, the kettle would not have heated up. This is because the heating came from the burning. If the heating came from the burning and the situation was simple, removing the burning would have removed the heating's source. Without the source, what came only from that source would not have come at all. (508)

It is not clear that Leftow's theory of causation has any content at all. It is natural to think of sources and producers as kinds of causes. The OED gives us that *sources* are *originating causes*; and that *to produce* is *to bring into being or existence, or to give rise to, or to bring about, or to cause*. If that is right, then Leftow gets things backwards when he says that causes are kinds of sources. In any case, if the dictionary is to be trusted, telling us that causes are sources at best provides us with linguistic information about synonymy. Of course, it is true that, in simple situations, if you were to remove the cause, you would remove the effect; and it is also true that this observation provides the foundation for counterfactual analyses of causation. But these observations provide us with no reason at all for thinking that causal dependence is modally flat.

I take it that what really motivates Leftow's claim that dependence is 'modally flat' is the demands of his theory of the genesis of secular modality. If God is to be the source of secular modality, then there cannot be any secular counterfactual dependence 'supported by' that sourcing, because secular counterfactual dependence is inextricably bound up with secular modality more generally. And, of course, his motivation for using instances of the locution 'God had it in him to do A' in connection with that 'sourcing' has a similar explanation: one alleged advantage of this locution is that it, too, is 'modally flat'.

Against Leftow, it seems to me that the global causal order is properly described with modally loaded vocabulary. There is a web of interconnected terms – cause, chance, power, possibility, law, counterfactual – that are proper tools to employ in the delineation of the (metaphysically) fundamental structure of reality. While I acknowledge that this is controversial, it seems to me to be plausible to suppose that there can be no real dependence between necessary existents, and, although I have not tried to argue for this at all here, that there is no genuine explanation of any necessities. All necessity is brute necessity.

6.2.6 A good argument for God's existence?

In the Preface, Leftow says that he offers three things to hook atheists' attention: 'a chance to bash theists, (part of) a new sort of argument for God's existence, and what I hope is some decent metaphysics that is detachable from the theistic context' (vii). So far, I have considered some of the metaphysics, and cast doubt on the idea that it is detachable from the theistic context. I turn now to the new argument for the existence of God (in Chapter 23).

The broad idea behind the argument is to appeal to theoretical virtue in order to decide between competing world views. If one world view is more theoretically virtuous than a second, then that is a compelling reason to prefer the first world view to the second. In particular, if the first world view scores better than the second on an appropriate weighting of simplicity (economy of ontological and ideological commitments), explanatory fit with data, explanatory scope, predictive power, theoretical unity and so forth, then we should prefer the first world view to the second. Leftow's hope is to develop an argument that shows that theism is superior to all rival world views.

I think that it is pretty clear that theism does not turn out to be theoretically superior to the kind of naturalistic world view that I hinted at

when sketching my conception of the global causal order. On the one hand, I claim, the naturalist has a more economical account of the global causal order, at least equal explanatory scope, at least equal predictive power, at least equal theoretical unity and at least parity on fit with every part of the data on a non-gerrymandered partitioning of the data. (I argue for this claim at length in Oppy (2013) and elsewhere.) On the other hand, I claim, the naturalist has an equally economical account of what we might call 'the abstract order', and scores no worse than the theist on all of the theoretical desiderata with respect to this domain. (I argue for this claim in Oppy (2014).) Moreover, I claim, it is obvious that if the first two claims are correct, then, when we put the 'two orders' together, the naturalist has a more economical account that is at least equal in explanation scope, predictive power, theoretical unity and fit with data on every part of the data on a non-gerrymandered partitioning of the data. So naturalism is more theoretically virtuous than theism.

Of course, my assessment of the comparative theoretical virtues of naturalism and theism is controversial. There are various ways in which it may have gone wrong. However, even allowing for the many ways in which it might have gone wrong, I think that it is pretty clear that the most that theists can hope for is a null verdict. On the one hand, it is certainly true that naturalism gives a more economical account of the global causal order than theism; and it *may* also be true that there are some parts of the data – concerning, for example, evil and divine hiddenness – which fit better with naturalism than with theism. On the other hand, if there are also ways in which theism scores better than naturalism, then we are left with the algorithmically intractable problem of weighing the advantages and disadvantages against one another. As I see it, this is then a matter for judgement, and, most plausibly, for reasonably agreeing to disagree.

While Leftow announces initially that he is giving part of a much larger argument, he goes on to say that 'my current claim is merely that if we keep our attention on modal metaphysics, God looks like a better buy than Platonism' (548). When we look at the discussion in the section 'Against Platonism' (546f.), we get (1) an argument that considerations about strangeness and surprisingness does not favour either theism over Platonist actualism, or Platonist actualism over theism; (2) an argument against taking considerations about evil to establish a very low prior epistemic probability for God; (3) an argument from the explanatory priority of the non-physical to the physical in modal matters; (4) an argument on grounds of ontological and ideological economy; and (5) an argument concerning escape from Benacerraf's dilemma concerning modal knowledge.

Of these, only (3)–(5) are arguments that support the claim that God is a better buy than Platonism.

In my view, the argument from the explanatory priority of the non-physical to the physical in modal matters is a non-starter. It is not true that there could fail to be anything physical at all: on the contrary, in every world, the global causal order is a global physical order. Of course, I do not deny that people can have mistaken beliefs about what is possible: there are certainly people who believe that there could have failed to be anything physical. But, in my view, those people are wrong; and we do not need to postulate more 'possibilities' in order to provide contents for the false beliefs that those people hold.

While this deserves more discussion than I can give it here, it seems to me to be pretty obvious that, insofar as we restrict our attention to properly modal matters, theism and Platonism tie on grounds of ontological and ideological economy. Leftow says that 'it would be hard to claim that an ontology of one solipsist with his thoughts is really less parsimonious than one of uncountable infinities of abstract substances' (550); but it is *not* hard to say that an ontology of one solipsist with an uncountable infinity of distinct ideas is no more and no less parsimonious than an uncountable infinity of abstract substances. At the very least, if we are going to make assessments of relative parsimony, we should want to give a fair and equal characterisation of the views that are under assessment.

On independent grounds, I think that the Benacerraf dilemma for modal knowledge is pretty underwhelming. But, in any case, we have no better access to the postulated uncountable infinity of distinct ideas in the divine mind than we do to the postulated uncountable infinity of abstract substances. Leftow tells a just-so story about how we might come to have 'connections' to ideas in the divine mind via God's hardwiring us to form certain kinds of beliefs 'given suitable thought experiments' (74), but we have overwhelming evidence – in the disagreements in judgements of professional philosophers who engage in thought experiments about abstract objects – that people do not actually have hardwiring of that kind. This same evidence also undercuts Leftow's suggestion that God's goodness guarantees that we have largely correct beliefs about modal ontology hardwired into us (75): for those of us who care most about these matters diverge wildly in their modal intuitions.

While the argument against taking considerations about evil to establish a very low prior epistemic probability for God is strictly irrelevant to the larger project (as I have described it), it is perhaps worth passing some comment on the things that Leftow says here. (The argument is irrelevant

because 'prior probability' should just be cashed out in terms of economy of ontological and ideological commitments. Considerations about evil are data, and get drawn into the discussion when we examine goodness of explanatory fit with data.)

Leftow says:

> Purely deductive ('logical') versions of the problem of evil are widely conceded to be 'dead', killed off by Plantinga's free will defence … The debate has shifted to 'evidential' versions of the problem of evil, and my own view, which is not uncommon, is that these are pretty thoroughly on the ropes – what's called sceptical theism provides an effective counter. (547)

Certainly, if we are thinking about *arguments* from evil – whether 'logical' or 'evidential' – there is a range of considerations that might be thought to lead to effective responses to those arguments. But if squaring theism with the data about evil involves the postulation of fallen angels, or an afterlife, or the existence of goods beyond our ken, or the like, then those are theoretical costs that further increase the advantage that naturalism has over theism in terms of economy of ontological and ideological commitments. Of course, it may be that the cost is offset elsewhere – in terms of better explanatory fit with data, or greater explanatory scope, or greater unity, or greater predictive power – but even if this is so, it does not gainsay the fact that there is theoretical cost involved. (See Oppy (2013) for further elaboration of this point.)

6.2.7 Biblical foundations?

Leftow claims to find biblical foundations for the claim that God is directly or indirectly the source of all that is outside God. Perhaps there are biblical foundations for this claim; but Leftow's defence of the claim that there are such foundations is not at all convincing.

Here are the passages from which Leftow claims to establish that the Bible tells us that God is directly or indirectly the source of all that is outside God: 'I am God, and there is no other. I am God, and there is none like me' (Isaiah 46:9); 'I am the first and I am the last; apart from me there is no God. Who then is like me?' (Isaiah 44:6–7); 'To whom will you compare me or count me equal' (Isaiah 46:5); 'You do not know the work of God who makes everything' (Ecclesiastes 11:5); 'He is the one who formed all things' (Jeremiah 10:16, 51:19); 'He who made heaven and earth' (Psalms 115:15, 121:2, 124:8, 134:3, 146:6).

The passages from Isaiah are set in a context of condemnation of idolatry and worship of other gods. Their purpose is to establish that God is

greater – and more worthy of worship – than all other gods and idols. None of these passages even speaks to the question whether God is directly or indirectly the source of all that is outside God. The one possible counter-example to this claim is Isaiah 44:6–7. Here, I take it, the natural reading is something like this: 'I am the first God and I am the last God; apart from me there is no God.' On this reading, this passage plainly does not speak to the question whether God is directly or indirectly the source of all that is outside God. While Leftow does hint that one might be sceptical that the passages make any claims about God's nature, he goes on to insist, without any further justification, that these passages do assert God's general uniqueness and particular uniqueness in respect of greatness, divinity and ultimacy.

The other passages cited pretty clearly refer back to Genesis 1:1–2. Leftow cites the New International Version translation: 'In the beginning God created the heavens and the earth. Now the earth was formless and empty, darkness was over the surface of the deep, and the spirit of God was hovering over the waters.' Leftow distinguishes two possible interpretations of this passage. On the first interpretation, there are raw materials – the formless earth, the deep and the waters – from which God fashions heaven and earth and all that is contained therein, but which are not themselves made by God. Against this interpretation, Leftow insists that the other passages cited earlier – from Ecclesiastes, Jeremiah and Psalms – clearly tell us that God made all things in heaven and earth, including whatever 'raw materials' there might be. I think that it is obvious that the passages in Psalms are neutral on this point; that, if anything, the passage from Jeremiah speaks in favour of the rejected interpretation (since 'forming' has at least some tendency to suggest use of raw materials); and that the interpretation of the passage from Ecclesiastes stands and falls with the interpretation of Genesis 1–2.

It is worth noting that the Revised Standard Version offers an alternative translation of Genesis 1–2: 'When God began to create the heavens and the earth, the earth was without form and void, and darkness was upon the face of the deep; and the wind of God was moving over the face of the waters.' This translation of Genesis 1–2 seems to me to rather more strongly suggest the interpretation that Leftow rejects. Moreover, that it is noted in the RSV that this is a serious alternative interpretation of the Hebrew text suggests, at the very least, that we should be cautious in leaping to the conclusions that Leftow wishes to draw.

Of course, even if it were accepted that God is the maker of all things in heaven and earth, that would not immediately justify acceptance of

the further claim that God is the maker of all things other than God. For, in particular, the question arises whether there are things other than God that are not denizens of heaven and earth. In particular, given that we make the plausible assumption that God and heaven and earth jointly constitute the global causal order, the question is whether there are things that do not belong to the global causal order.

There are other biblical passages that might be brought to the table: 'All things come from God' (1 Corinthians 11:12); 'From him and through him and to him are all things' (Romans 11:36); 'All things came into being through him, and without him not one thing came into being' (John 1:1–3). Should we suppose that, in these passages, 'all things' should be interpreted to extend beyond 'all things in heaven and earth', to pick up whatever non-causal objects there might be? At the very least, it is not obvious that this is how these passages should be interpreted. In particular, if there are necessarily existent abstract entities, and if it is impossible that anything creates necessarily existent entities, then the existence of such abstract entities could not possibly be a threat to the majesty, or power, or goodness, or perfection of God. Or so it seems to me.

It is perhaps worth observing that, come what may, some of these passages are clearly in need of interpretation. Taken literally, 1 Corinthians 11:12 commits us to the absurd claim that God comes from God. At the very least, we should suppose that there is an ellipsis: 'all things' really means 'all things other than God'. But even with this modification, we still face questions about the intended domain over which this quantifier is supposed to range. Given the framing context of the Old Testament, it seems to me to be natural to interpret 'all things' in the light of the Old Testament accounts of creation (in Genesis 1–2, etc.). At the very least, it is a reasonable interpretative principle that one should interpret passing references to the range of God's creative activities in the light of that part of the text that actually pays explicit attention to the creative activity in which God is supposed to have engaged. But, as we have already seen, that part of the text does not obviously bear the interpretation that Leftow tries to place upon it.

6.3 God and abstract objects

Leftow's investigation of the ontology of modal claims is one part of a larger investigation of the status of abstract objects. In the final part of this chapter, I provide some brief remarks about the relationship between God and abstract objects.

6.3.1 Initial questions

There are many potential denizens of abstract reality: numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects, properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects and so on. Of course, friends of abstract reality debate amongst themselves which of these – and other – potential denizens of abstract reality *are* denizens of abstract reality. Various questions arise.

One question concerns the distinction between causal reality and abstract reality, or the allied distinction between concrete objects and abstract objects. There are various candidates for distinguishing between concrete objects and abstract objects – for example that the latter are 'non-mental and non-sensible', or 'non-mental and non-physical', or 'non-spatial and causally inefficacious', or 'generated by an abstraction function', etc. I think that the right way to draw the distinction is in terms of causation: concrete objects are denizens only of causal reality; abstract objects are denizens only of abstract reality. But not everyone is persuaded that the distinction can be drawn in these terms. Consider, for example, Rosen (2012):

> It is widely maintained that causation strictly speaking is a relation among events or states of affairs. If we say that the rock – an object – caused the window to break, what we mean is that some event or state (or fact or condition) *involving* the rock caused the breaking. If the rock itself is a cause, it is a cause in some derivative sense. But this derivative sense has proved elusive. The rock's hitting the window is an event in which the rock 'participates' in a certain way, and it is because the rock participates in events in this way that we credit the rock itself with causal efficacy. But what is it for an object to *participate* in an event? Suppose John is thinking about the Pythagorean Theorem and you ask him to say what's on his mind. His response is an event – the utterance of a sentence; and one of its causes is the event of John's thinking about the theorem. Does the Pythagorean Theorem 'participate' in this event? There is surely *some* sense in which it does. The event consists in John's coming to stand in a certain relation to the Theorem, just as the rock's hitting the window consists in the rock's coming to stand in a certain relation to the glass. But we do not credit the Pythagorean Theorem with causal efficacy simply because it participates in this sense in an event which is a cause. The challenge is therefore to characterize the distinctive manner of 'participation in the causal order' that distinguishes the concrete entities. This problem has received relatively little

> attention. There is no reason to believe that it cannot be solved. But in the absence of a solution, this [characterisation] must be reckoned a work in progress.

It seems to me to be plausible to suppose that Rosen's challenge can be met. Suppose, for example, that we think that causation is marked by transfer of conserved quantities: wherever there is causation, there is transfer of conserved quantities between entities. When the rock hits the window, there is transfer of conserved quantities – energy and momentum – between the rock and the window. When John tells you what is on his mind, there is transfer of conserved quantities between his neural states and yours, via an intermediate chain of such transfers. John's thinking about the Pythagorean theorem just is his being in a certain kind of neural state – that is appropriately characterised using the expression 'thinking about the Pythagorean theorem' – but there is no transfer of conserved quantities anywhere in the relevant causal chain between the Pythagorean theorem and other entities. Whereas the rock and window 'participate in the causal order in the manner that is characteristic of causal entities', the Pythagorean theorem does not.

Now, of course, not everyone accepts that causation is marked by transfer of conserved quantities, and not everyone accepts that mental states just are neural states – but these assumptions are not essential to the meeting of Rosen's challenge. What matters is that there is some story told about causation that, on the one hand, brings the rock and the window into the causal domain *as causal entities*, in the way that the invocation of transfer of conserved quantities between the rock and the window does; and, on the other hand, invokes the Pythagorean theorem only in roles – for example of characterisation of the content of mental states – that do not bring *it* into the causal domain *as a causal entity*. (Perhaps it might be added here that we should be a bit cautious in accepting that there is some sense in which the Pythagorean theorem 'participates' in the event of John's thinking about the theorem. For suppose, instead, that John had been thinking about Santa Claus. Is there really a good sense in which Santa Claus 'participates' in the event of John's thinking about Santa Claus? Non-existent entities simply cannot be causal entities in the causal domain; it is *hopelessly* wrong to suppose that Santa Claus is involved in transfers of conserved quantities with other causal entities that belong to causal reality.)

Another question concerns allegedly distinctive properties of the denizens of abstract reality. It is often claimed that the denizens of abstract reality are distinguished by facts concerning the *necessity* of their existence

and nature, the extent to which it is possible to have *a priori* knowledge of their existence and nature, and the *absolute* truth or falsity of claims made concerning their existence and nature. However, it is important not to go beyond what is properly defensible in making claims of these kinds. In particular, it is important to note that the denizens of abstract reality appear to divide into *two* classes. On the one hand, there are the *pure* abstracta, which: (1) exist of *necessity*; (2) have only *essential* intrinsic properties and *essential* relations to other pure abstracta; (3) can be known *a priori* to exist and to have the intrinsic properties and relations to other pure abstracta that they do have; and (4) can be described or referred to in sentences that are true or false *absolutely*, and not merely true or false relative to a certain type of theory or model. On the other hand, there are the *impure* abstracta, which (1) exist *contingently*, but whose existence is necessary given the existence of appropriate denizens of causal reality; (2) have *accidental* intrinsic properties and *accidental* relations to other abstracta, but only in cases where those intrinsic properties and relations are necessary given the existence of appropriate denizens of causal reality; (3) can only be known *a posteriori* to exist and to have the intrinsic properties and relations to other abstracta that they do have, despite the fact that it can be known *a priori* that these abstracta exist and have the properties and relations that they do given the existence of appropriate denizens of causal reality; and (4) may be described or referred to in sentences that are merely true or false relative to a certain type of theory or model, depending upon whether or not that theory or model adverts to the existence of appropriate denizens of causal reality. Putative examples of pure abstracta include numbers and pure sets (the iterative hierarchy generated from the null set); putative examples of impure abstracta include impure sets (for example unit sets of denizens of causal reality). (Cf. Yablo (2002).)

6.3.2 Realism versus anti-realism

The most obvious distinction to draw, in connection with views about abstract reality, is the distinction between (1) views which claim that there are some abstract objects (and hence which affirm that there is a domain of abstract reality), and (2) views which claim that there are no abstract objects (and hence which deny that there is any such domain as abstract reality). I shall refer to the former class of views as *realism* about abstract reality, and to the latter class of views as *anti-realism* about abstract reality.

Within realist views about abstract reality, we can distinguish between views that are full-bloodedly committed to abstract objects, and views that have a more deflationary commitment to abstract objects. Examples of what I take to be full-blooded commitments to abstract objects include the commitment of Quine (1960) to sets, the commitment of Armstrong (1978) to universals and the commitment of Gödel (1964) to numbers. An example of what I take to be more deflationary commitment to abstract objects is the commitment of Hale and Wright (2009) to numbers.

Within anti-realist views about abstract reality, we can distinguish between *struthioism* – which barefacedly denies that straightforward talk ostensibly about abstract objects brings with it commitment to the existence of any such objects – and *fictionalism* – which aims to 'explain away' the apparent commitment to abstract objects in different kinds of things that we say. A good example of fictionalism is the general program of Yablo (2000; 2002; 2005); a good example of struthioism is the position defended by Craig (2014). There are, of course, many recent instances of fictionalism about particular abstracta – for example Field (1980), Melia (1995) and, perhaps, Rosen (1990) – but we are here interested in versions of fictionalism that treat the entire domain of abstract reality as fiction.

The above taxonomy may appear to omit generalisations of traditional versions of nominalism. In particular, some may say that I have overlooked *tokenism* – which eschews commitment to abstracta in favour of commitment to 'extra-mental' denizens of causal reality, such as linguistic tokens, or tokenings – and *conceptualism* – which eschews commitment to abstracta in favour of commitment to 'mental' denizens of causal reality, such as 'concepts', or 'ideas in the mind', or the like. However, I deny that there are viable views that fall under either of these labels. (I shall have more to say about this later.)

6.3.3 Comparing options

It is no part of my present project to take a stance on which is the correct view to hold about abstract reality. However, it will be useful for me to say something about the comparative plausibility of realism, struthioism and fictionalism.

Yablo (2000; 2002; 2005) claims that certain pieces of language that appear to commit us to abstract objects function as representational aids that boost expressive power. In particular, in Yablo (2005), he sets out a meta-myth which shows how the 'myth of mathematics' might have arisen as the result of the adoption of a series of representational aids aimed at

boosting the expressive powers of language. According to the meta-myth, we start out with a first-order language quantifying over concreta, and then add further resources – involving various kinds of 'pretence' or 'supposition' or 'making as if' – in order to facilitate expression of useful claims about concreta. First comes 'finite numbers of finite numbers', then 'operations on finite numbers', then 'finite sets of concreta', then 'infinite sets of concreta', then 'infinite numbers of concreta' and finally 'infinite sets (and numbers) of abstracta'.

The kind of idea that Yablo expresses here in connection with numbers finds application in other domains. It is commonplace in discussions of truth that the truth predicate serves an evident need: without it, we would need to cast around for some other means of expressing the thought that *everything that the Pope says is true*, and the like. While there are theoretical alternatives – for example infinite disjunction or insistence on infinitely many instances of a sentential schema – there is no alternative that admits of finite expression. (This same example demonstrates the value of propositional quantification, a value that we can exhibit using examples that have nothing to do with truth. Consider, for example: *He had nothing new to say*. This claim could also be expressed as an infinite disjunction, or via insistence on infinitely many instances of a sentential schema.) Similarly, in the discussion of universals, while it is has been argued by some that sentences such as *Napoleon has all of the attributes of a great general* demonstrate that we are committed to universals, it is clear that we can understand explicit talk of attributes in this kind of case as a representational aid that serves to boost the expressive power of our language. (In this case, too, there are similar theoretical alternatives, for example infinite conjunction or insistence on all the instances of a sentential schema.) Of course, there are other examples of sentences alleged to demonstrate commitment to universals – consider, for example, *Red resembles orange more than it resembles blue*, discussed in Jackson (1977) and Lewis (1983) – that raise different considerations. I am inclined to think that this sentence is just false – but that is really a story for another occasion.

While it seems to me to be plausible to suppose that often – perhaps even always – where we feel pressure to postulate abstracta, we find representational aids that boost the expressive power of language, it is not obvious that this gives us a decisive argument against either realism or struthioism about abstracta. After all, it is clearly conceivable that, in finding representational aids that boost the expressive power of our language, we make discoveries about the denizens of abstract reality; and it is also clearly conceivable that, in finding representational aids that boost the

expressive power of our language, we find justification for practices that stand in no need of independent justification. Nonetheless, I am inclined to think that, at least, wherever we can point to connections between apparent commitments to abstracta and devices that boost the expressive powers of language, we have a powerful motivation to think that fictionalism affords the best account of the abstracta in question.

6.3.4 Bringing God into the picture

Given the range of views that can be taken about abstract reality, we can ask whether some of these views sit more comfortably with theism than others of these views. I propose to argue that, while there are various difficulties that confront the claim that God is the creator of abstract reality, there are no serious difficulties in squaring the existence of God with the existence of an independent abstract reality; and nor are there serious difficulties involved in squaring theism with struthioism and fictionalism.

6.3.4.1 God and realism

There are various reasons for thinking that it is hard to square belief in abstract reality with the claim that God is the creator of abstract reality.

First, if God is the creator, or source, or ground of abstract reality, then abstract reality has a cause, or source, or ground – whence abstract reality is part of causal reality, in contradiction with our initial assumption about the nature of abstract reality. Moreover, we cannot repair this problem by supposing that God belongs to abstract reality: for then God would not be the cause, or source, or ground of anything, and, in particular, would not be the cause, or source, or ground of natural reality.

Second, if realism requires that the denizens of abstract reality are either necessary, or else necessary given the mere existence of denizens of causal reality, then it is impossible that anything – even God – be their creator, or ground, or source. Anything that is created, or that has a ground or a source, is *dependent* upon the thing that is its creator, or ground, or source for its existence, and so is something whose existence is *contingent*, in contradiction with our assumption that it either exists of necessity, or else exists of necessity given the mere existence of other things. Dependence and contingency are asymmetric modal relationships: if A depends upon or is contingent upon B, then either it is possible not to have B, or else it is possible to have B without A – and, either way, it follows that it is possible to not have A. (True, in the *Third Way*, Aquinas writes of 'necessary

beings that owe their necessity to something else'. But in this context, the 'necessary beings that owe their necessity to something else' are merely eternal beings whose existence is metaphysically contingent upon God's creative activities. So there is no counter-example to be found in that part of that *Summa*.)

Third, even setting the preceding two considerations aside, there seems to be a further difficulty in the idea that God might be the cause, or ground, or source of abstract reality that arises from the role that the denizens of abstract reality have in the *characterisation* of the denizens of causal reality. If, for example, there are universals in abstract reality, then entities in causal reality *participate* in at least some of those universals; if, to take another example, there are propositions in abstract reality, then entities in causal reality *have* at least some of those propositions as *contents*; and so forth. But, on the assumption that God creates abstract reality, it follows that there is a part of causal reality – the part that is (causally) prior to the creation of abstract reality – that is not related to abstract reality by the appropriate kinds of characterisation relations. On the one hand, we are to suppose that we are required to believe in abstract reality because of the *essential* role that it plays in 'characterising' elements of causal reality; and yet, on the other hand, we are to suppose that there is an entity in causal reality that lies beyond all of these allegedly essential 'characterising' elements: at least prior to the creation of abstract reality, God exists in some way and yet participates in no universals, has thoughts even though there are no contents of thoughts to be had, and so forth. I think that I will not be alone in suspecting that this overall picture is just incoherent.

Of course, none of these arguments is a reason for supposing that we cannot square the existence of God with the existence of abstract reality. Leftow's arguments notwithstanding, it seems to me that there is no serious obstacle to theistic belief in abstract reality, though, of course, there is serious competition in the form of theism combined with fictionalism or struthioism about abstract reality. Of course, we have still to see whether we can square the existence of God with these stances on abstract reality. Since it is obvious that we can square theism with struthioism, we have only to consider the case of fictionalism.

6.3.4.2 God and fictionalism

If we are fictionalists about abstracta, then we suppose that we can *explain* apparent commitments to abstracta by (1) appealing to the utility

of adopting linguistic devices that generate the apparent commitments, and (2) adding some further story about how we take on the linguistic devices without taking on the apparently generated commitments. The further story may involve claims about the attitudes that we actually have towards the linguistic devices in question – perhaps claiming that, in fact, we view them in such a way that we take the apparent commitments that they generate to be merely apparent – or it may only involve claims about the attitudes that we could justifiably take towards the linguistic devices in question – perhaps claiming that we could justifiably view the apparent commitments that they generate as merely apparent. (Roughly, the distinction to which I am adverting here is the distinction between *hermeneutic* and *revisionary* fictionalisms. There are many other philosophical domains in which similar distinctions are drawn: consider, for example, the different ways in which contractarian political and ethical theories can be formulated.) And, of course, the further story might also involve claims to the effect that different parts of abstract reality are treated in different ways: 'hermeneutic' fictionalism is appropriate for some abstracta (perhaps, for example, 'sakes'), while 'revisionary' fictionalism is appropriate for other abstracta (perhaps, for example, natural numbers).

The key point to note about fictionalism is that it appeals only to facts about human beings: the languages that we speak, the linguistic devices that we have invented and the interpretations that we ourselves place upon the languages that we speak and the linguistic devices that we employ. Given that there is nothing in the data about human beings, the languages that they speak and the linguistic devices that they employ that bears directly on questions about the nature and existence of God, there is no reason to suppose that there is any particular difficulty involved in marrying fictionalism about abstract objects with belief in God.

Perhaps some may be tempted to object that facts about the evolution of human beings, or the evolution of human intellectual capacities, or the evolution of human languages actually tell against theism. However, even if it were true that facts about the evolution of human beings, or the evolution of human intellectual capacities, or the evolution of human languages do tell against theism, these considerations would all belong to the 'causal' data that is the standard focus of traditional arguments about the existence of God. Unless there is something, about representational devices that boost the expressive power of languages at the cost of merely apparent commitments to abstracta, that *adds* to considerations about the evolution of human beings, or the evolution of human intellectual

capacities, and the evolution of human languages, there is no special difficulty that fictionalism about abstract objects creates for belief in God.

6.3.5 Other options?

As I noted above, some may think that it would be premature to draw a close to our discussion without considering some further competing views of abstract reality that might be given a theistic setting. I turn now to the task of arguing that these other proposed candidate views – tokenism and conceptualism – do not offer viable accounts of abstract reality.

6.3.5.1 Against tokenism

According to tokenism, apparent commitments to abstracta turn out to be genuine commitments to extra-mental denizens of causal reality. So, on this view, there really are abstracta – such things as numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects, properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects and so on – but these things are extra-mental denizens of causal reality: linguistic tokens, or linguistic tokenings, or appropriately shaped regions of space-time, or the like.

This view seems to be to be entirely misconceived. When we produce linguistic tokens, or make linguistic tokenings, those linguistic tokens or linguistic tokenings are, themselves, causal entities that belong to causal reality. But when we ask what we *commit ourselves to* in producing these linguistic tokens or making these linguistic tokenings, it simply is not part of the correct answer that we *commit ourselves* to the very linguistic tokens that we have produced, or the linguistic tokenings that we have made, and nor is it part of the correct answer – at least, in general – that we *commit ourselves* to some other linguistic tokens or linguistic tokenings (that are appropriately related to the linguistic tokens that we have produced or the linguistic tokenings that we have made). To suppose that abstracta – such things as numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects, properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects and so on – are linguistic tokens, or linguistic tokenings, or appropriately shaped regions of space-time is just to make a kind of category error.

6.3.5.2 Against conceptualism

According to conceptualism, apparent commitments to abstracta turn out to be genuine commitments to mental denizens of causal reality. So, on this view, there really are abstracta – such things as numbers, sets, classes, functions, mappings, structures, groups, rings, algebras, states, patterns, propositions, contents, intentional objects, properties, universals, attributes, characteristics, types, normative principles, values, utilities, generic objects, arbitrary objects, intensional objects, mere possibilia, impossibilia, incomplete objects and so on – but these things are mental denizens of causal reality: concepts, or ideas, or the like.

This view seems to me to be vitiated by an ambiguity in talk of concepts, or ideas, or the like. When we talk about concepts, or ideas, there are two different things that we might be meaning to discuss. On the one hand, we might be talking about mental tokens: causal entities that are denizens of causal reality. On the other hand, we might be talking about the contents of mental tokens: putative abstracta that would be denizens of causal reality if realism is the appropriate attitude to take towards them. And there is no third thing that we might be talking about: either we are talking about mental tokens, or we are talking about contents of mental tokens.

However, if we are talking about mental tokens, then conceptualism is just a variant of tokenism, in which the tokens in question are mental rather than extra-mental. But whether the tokens are mental or extra-mental makes no difference to the viability of tokenism: either way, it is just a category mistake to suppose that putative abstracta are causal tokens.

On the other hand, if we are talking about the contents of mental tokens, then we have not been offered any account of putative abstracta: for what our theory of abstract reality is supposed to do is to give us an account of such things as the contents of mental tokens. If conceptualism claims only that putative abstracta are contents of mental tokens, then it simply fails to be a theory of abstract reality.

Either way, then, conceptualism is not a viable theory of abstract reality. Whatever account we might give of abstracta, we cannot say that abstracta are concepts, or ideas, or the like.

What, then, of the intuition that many putative abstracta are 'mind-dependent'? Well, if we are realists about abstract reality, we shall say that, at least for the range of cases for which there really are denizens of abstract reality, the intuition is simply mistaken. And if we are fictionalists about abstract reality, then we shall say that our fictionalist theory gives us all of the mind-dependence that we could require: for, of course,

the representational aids that boost the expressive powers of our language, thereby generating apparent commitments to abstracta, are products of human minds. If Yablo's 'myth of the seven' captures something important about our apparent commitment to numbers, then Yablo's 'myth of the seven' establishes a significant sense in which 'numbers are mind-dependent'. What more could you want?

6.3.6 Plantinga's arguments

Plantinga (2007) claims that there are various good arguments for the existence of God concerning denizens of abstract reality; in particular, he sketches arguments concerning natural numbers, sets and intentional objects:

Argument from numbers:

> It … seems plausible to think of numbers as dependent upon or even constituted by intellectual activity … So, if there were no minds, there would be no numbers … But … there are too many of them to arise as a result of human intellectual activity. We should therefore think of them as among God's ideas. (213)

Argument from sets:

> Many think of sets as displaying the following characteristics …: (1) No set is a member of itself; (2) Sets … have their extensions essentially; hence sets are contingent beings and no set could have existed if one of its members had not; (3) Sets form an iterated structure: at the first level, sets whose members are non-sets, at the second, sets whose members are non-sets or first-level sets, etc. Many [are] also inclined to think of sets as collections – i.e. things whose existence depends upon a certain sort of intellectual activity – a collecting or 'thinking together'. If sets were collections, that would explain their having the first three features. But of course there are far too many sets for them to be a product of human thinking together; there are far too many sets such that no human being has ever thought their members together. That requires an infinite mind – one like God's. (211f.)

Argument from intentionality:

> Consider propositions: the things that are true or false, that are capable of being believed, and that stand in logical relations to one another. They also have another property: aboutness or intentionality … [they] represent reality or some part of it as being thus and so … Many have thought it incredible that propositions should exist apart from the activity of minds … But if we are thinking of human thinkers, then there are far too many propositions: at least, for example, one for every real number that is distinct from

> the Taj Mahal. On the other hand, if they were divine thoughts, no problem here. So perhaps we should think of propositions as divine thoughts. (210f.)

I do not think that we should be quick to agree with Plantinga that these are promising routes to arguments for the existence of God. There are several reasons for this.

First, of course, there is the ambiguity in talk about 'God's ideas', 'divine thoughts' and the like. When Plantinga says that 'we should think of numbers as among God's ideas', or that 'we should think of propositions as divine thoughts', what he says is ambiguous. He could mean: we should think that numbers and propositions are God's mental state tokens – causal things that belong to causal reality. Or he could mean: we should think that numbers and propositions are contents of God's mental state tokens – abstracta that belong to abstract reality. However, as we have already noted, numbers and propositions cannot be things that belong to causal reality; and the observation that numbers and propositions are contents of God's mental state tokens simply fails to be an account of putative abstracta. Since there is no third construal that can be placed upon talk about 'God's ideas', 'divine thoughts' and the like, we can conclude that there is no way that the arguments that Plantinga sketches here can be carried through.

Second, if we grant that there is some *prima facie* plausibility to the thought that numbers are 'dependent upon or even constituted by' intellectual activity – and that sets are 'things whose existence depends upon a certain sort of intellectual activity', and that it is 'incredible that propositions should exist apart from the activity of minds' – we can explain away this *prima facie* plausibility by appealing to fictionalist accounts of numbers (and sets and propositions). We might say, for example, that our commitments to numbers – and sets and propositions – arise from our adoption of certain representational aids that boost the expressive power of our language (and advert to, say, Yablo's 'myth of the seven'). Without the activity of our minds that went into developing – and goes into supporting – the use of those representational aids, we would not have any inclination or reason to suppose that we have even *prima facie* commitment to the existence of numbers (or sets or propositions), and questions about the existence of numbers (and sets and propositions) would not so much as arise.

Third, even if we were to follow Plantinga in supposing that it is literally true that the existence of, say, numbers is constituted by intellectual activity, it is not clear that the kind of argument that he tries to develop will

go through. Suppose, for example, that the existence of numbers is constituted by there being people whose minds contain tokens of sentences like this one: 'There are infinitely many natural numbers.' If the occurrence of a token of this kind in someone's mind is enough to make it the case that there are infinitely many natural numbers, then it seems that Plantinga is simply mistaken when he claims that there are too many natural numbers for them to arise as the result of human intellectual activity. If I can have a bunch of tokens in my head that *entail* infinitely many further claims, even though it is impossible for me to have infinitely many tokens – separately representing each of those infinitely many further claims – in my head, then it is unclear why the infinite nature of mathematical domains should be thought problematic.

For these – and other – reasons, I conclude that there is no prospect of developing successful arguments for the existence of God from considerations about natural numbers, sets, propositions or any other abstract objects, along the lines that Plantinga proposes. Perhaps it is worth noting in closing that there are other arguments for the existence of God – concerning our *knowledge* of matters involving putative abstracta – that would require further discussion. All that has been canvassed here is the possibility of arguments for the existence of God based upon the *metaphysics* of abstract objects. Arguments for the existence of God based upon the *epistemology* of abstract objects will have to wait for some other occasion. (See Oppy (2013) for some preliminary discussion.)

CHAPTER 7

Fundamentality

There are several different ways in which God might be thought to be fundamental. First, it might be thought that, while there is nothing that *grounds* God, God grounds everything else. Second, it might be thought that, while there is nothing that *causes* God, God causes everything else. Third, it might be thought that, while there is nothing that sets *goals* for God, God sets goals for everything else. Fourth, it might be thought that, while there is nothing that measures the *value* of God, God measures the value of everything else. Fifth, it might be thought that, while everything else is transient, God is somehow *permanent*. We explore each of these thoughts in turn.

7.1 Ground

In considering the suggestion that, while there is nothing that grounds God, God provides grounds for everything else, I am *not* considering anything in the vicinity of Tillich's claim that God is 'the ground of being itself'. Tillich's view – according to which God, the source of all being, is somehow 'beyond' being and non-being – seems to me to be necessarily false. I think that I understand views according to which God is the source of all *other* being; I can make nothing at all of views according to which there are divine–human encounters even though God has no being.[1]

The notions of grounding and fundamentality are closely linked. As Schaffer (2009) observes, we can define fundamentality in terms of grounding: *x is fundamental just in case nothing grounds x*. The relation of grounding is irreflexive, anti-symmetric and transitive: nothing grounds itself; if x grounds y then y does not ground x; and if x grounds y and y

[1] A reader for the publisher worried that, in using the expression 'God has no being,' I am committing myself to the idea that being is 'quantifiable', i.e. that it 'comes in degrees'. I insist that I am not making any such commitment; rather, I am simply making use of a familiar idiom. Compare: 'John has no home.'

grounds z, then x grounds z. The same is true for the relation of greater fundamentality: indeed, by definition, if x grounds y, then x is more fundamental than y.

For Abrahamic theists, the claim that there is nothing that grounds God should seem entirely unproblematic: their scripture, their creeds and their common pronouncements all agree in this judgement. Moreover, the same seems to be true for other theists as well: even pantheists and panentheists can agree that there is nothing that grounds God.

The claim that God grounds everything else is quite another matter. In order to explore this claim further, we need to think about the goal of ontological or metaphysical inquiry. Again following Schaffer (2009), it seems plausible to suppose that the goal of ontological or metaphysical inquiry is to map ontological or metaphysical structure: to determine what are the basic, ultimate, fundamental units of being ('the substances'), what are the grounding relations which permit the 'construction' of all else from those substances, and what is in fact 'constructed' from the substances. Given this conception of the goal of ontological or metaphysical inquiry, it seems clear that theists will suppose that God is a substance.

However, given this conception of the goal of ontological or metaphysical inquiry, it seems equally plain that theists will typically *not* suppose that God is the only substance. True enough, Spinoza appears to have thought that God is the sole ground of everything else in precisely this way: but there are very few theists who have agreed with Spinoza, and many theists have thought that Spinoza is an atheist, or a pantheist, or a peddler of some other disreputable world view.[2]

Schaffer (2009) favours a world view according to which there is really just one substance: the cosmos. On his favourite conception, the cosmos is a field-bearing manifold. Since I have doubts about whether quantum field theory is ultimate physical theory, I have doubts about whether we should think that everything is grounded in a field-bearing manifold. If there is a version of string theory that succeeds quantum field theory, then, as far as I can tell, we shall have reason to deny that everything is grounded in a field-bearing manifold. Nonetheless, Schaffer's view provides a nice illustration of a view that even some theists might be able to accept: for, on any acceptable ontological or metaphysical view, there will be something – or some things – in which the natural universe is grounded. Of course, theists will insist that there are substances other

[2] If you are inclined to object that theists from Augustine to Edwards and beyond have insisted that God is the one true substance, hold that thought for a couple more paragraphs!

than that in which the natural universe is grounded; in particular, as we have already noted, they will insist that God is a substance. But theists will also accept that, when God created our universe, God created a distinct substance in which our universe is grounded.

In order to ward off a possible confusion, it is important to note that there are conceptions of substance on which theists might suppose that God is the sole substance: but those conceptions of substance are not presently in play. If you suppose that substances are capable of absolutely independent existence, then you might think that theists should insist that God is the sole substance. However, the idea that substances are capable of absolutely independent existence forms no part of the conception of substance that is in use in the preceding discussion. For our purposes, what is characteristic of substances is merely that they are basic units of being: the elements from which all other being is 'constructed'. Even if the existence of our universe depends upon God's continuous conserving activity, it remains the case that the universe is not a 'construction' that has God as a 'constituent' or 'proper part'.

Perhaps there are some theists who will disagree with the verdict of the preceding paragraph. In particular, there are theists who suppose that the only substances are minds, and that all else is 'constructed' from ideas in those minds. However, even theists who have this kind of idealist bent will typically suppose that God is not the only mind: there are other minds which also count as substances by the standards of the present discussion. In particular, theists who are concerned to preserve a robust sense of creaturely freedom have reason to allow that there are non-divine minds that count as substances by the standards of the present discussion: if non-divine minds are merely ideas in the mind of God, then God's thinking is the ultimate determinant of the 'actions' of these minds. Of course, this kind of theistic idealism is a minority position: my own view is that any kind of idealism about the natural world is necessarily false, and hence, in particular, that this kind of theistic idealism is necessarily false.

Perhaps there are some theistic idealists who will insist that the considerations raised in the preceding paragraph are hardly decisive. Even if it is true that it is unattractive to suppose that non-divine minds are merely ideas in the mind of God, could we not suppose, instead, that non-divine minds are 'proper parts' or 'constituents' of the divine mind? While this view might be one on which, according to the standards of the present discussion, God is the sole substance, it is plain that it is plagued with serious problems. On the one hand, there are good reasons for thinking that the claim that there are minds that are 'proper parts' or 'constituents'

of other minds is necessarily false: it cannot be that two distinct minds jointly 'constitute' a third mind. And, on the other hand, most theists will baulk at the idea that creaturely minds jointly 'constitute' God, both for reasons concerning divine 'otherness' and for reasons concerning divine and creaturely freedom.

Suppose that two distinct minds M1 and M2 did jointly 'constitute' a third mind, M3. M1, M2 and M3 are distinct minds, with distinct perceptual inputs P1, P2 and P3, distinct internal processing I1, I2 and I3, and distinct behavioural outputs B1, B2 and B3. But how is P3 related to P1 and P2, how is I3 related to I1 and I2, and how is B3 related to B1 and B2? If we are promiscuous mereologists, we might suppose that there are such things as the fusions of P1 and P2, I1 and I2, B1 and B2 and, indeed, M1 and M2. But we have no reason to suppose that the fusion of P1 and P2 is itself perceptual input, or that the fusion of I1 and I2 is internal processing, or that the fusion of B1 and B2 is itself behaviour, or, indeed, that the fusion of M1 and M2 is a mind. And, whether or not we are promiscuous mereologists, it is hard to identify any other even *prima facie* plausible candidate that relates P1 and P2 to P3, I1 and I2 to I3, B1 and B2 to B3 and M1 and M2 to M3. (Note that I am not here assuming that there is nothing more to minds than perceptual inputs, internal processing and behavioural outputs. All I am assuming is that, whatever more there may be, minds do involve perceptual inputs, internal processing and behavioural outputs. If you think that there is no perceptual input to the divine mind, then just run the considerations in terms of internal processing and behavioural outputs.)

Even if you have a more optimistic view about the prospects for theistic idealism than I do, you should surely concede that, as things now stand, most theists are not idealists. Most theists hold that God created a mind-independent universe populated with minded physical beings. Consequently, most theists hold that God created at least one other substance: for the mind-independent universe populated with minded physical beings has a substantial grounding, and that substantial grounding lies in something other than God. Of course, theists can disagree about the nature of the substantial grounding for our universe. At one extreme, some theists might agree with Schaffer that there is just one relevant substance: a field-bearing manifold. At another extreme, some theists might think that there is a vast multiplicity of relevant substances: perhaps, for example, a vast collection of physical simples together with a very large collection of non-physical minds. Moreover, of course, some theists suppose that there are yet further substances apart from God and the

substances that ground our universe; some theists suppose, for example, that there are supernatural agents other than God – angels, demons and the like – which are either themselves substances or else grounded in further supernatural substances.

Minority positions aside, while theists accept that nothing grounds God, theists do not accept that God grounds everything else. Similar considerations apply to related claims in other vocabularies. If, for example, you prefer to talk about 'constitution' rather than grounding, then the appropriate conclusion is something like this: minority positions aside, while theists accept that God is not constituted from anything else, theists do not accept that everything else is constituted from God.[3]

What if you prefer to talk about 'supervenience'? Clearly, in this case, it matters what conception of supervenience is adopted. If supervenience is taken to be an anti-symmetric modal dependence relation, then theists will claim that God does not supervene upon anything else. (If supervenience is merely taken to be a symmetric or asymmetric modal relation, then theists can claim that God does supervene upon other things, but they can further insist that the 'dependence' in question is merely of the 'Cambridge' variety.) Moreover, if supervenience is taken to be an anti-symmetric modal dependence relation, theists will typically claim that it is not true that everything else supervenes upon God. To take just one example, Molinists suppose that the truths of counterfactuals of creaturely freedom do not have an anti-symmetrical modal dependence upon God: while there is a perfect match between God's middle knowledge and the counterfactuals of creaturely freedom, the direction of dependence is actually from God's middle knowledge to the antecedent truth of the counterfactuals of creaturely freedom.

7.2 Cause

Many theists suppose that God is the uncaused cause of pretty much everything that can have a cause. True enough, there are some theists who suppose that it is mistaken – and perhaps even idolatrous – to maintain that God is a causal agent. (See, for example, Johnston (2009) and Gleeson (2012).) However, the majority view – for both professional philosophers

[3] A reader for the publisher: 'Don't they? What about the doctrine of divine ideas? What about Anselm's claim that there is a single exemplar – the second person of the Trinity – after whom all things are patterned? What about St Augustine's discussion of this material in books 11–12 of his *Confessions*?' I take the paradigm for constitution to be the relation of a statue to the material from which it is formed. The view I am rejecting is the view that all other things are 'worked-up' lumps of God.

and the wider public – is that, if God exists, then God is the creator of heaven and earth.

The view that God has no cause is more or less ubiquitous among theists. Even theists who are sceptical about causation and theists who think that it is mistaken – and perhaps even idolatrous – to maintain that God is a causal agent agree that God has no cause. While it is perhaps not *inconceivable* that the one and only god has a cause of its existence, it is more or less universally agreed that it is not very attractive to suppose that there is one and only one god and that that god has a cause of its existence.

There have been some theists who have demurred from the judgement in the preceding paragraph on the grounds that God is the cause of God's existence. I think that these theists cannot be right. If we suppose that the claim that these theists make is that God is the cause of God, or that God's existence is the cause of God's existence, then we can appeal to the same kinds of considerations that were raised in section 6.1 above. Any instance of 'A causes B' entails the corresponding instance of 'B because A'. Hence, any instance of 'A causes A' entails the corresponding instance of 'A because A'. But, since 'A because A' is always an explanatory solecism, no claim of the form 'A causes A' is acceptable. So the claim that these theists make cannot be that God is the cause of God or that God's existence is the cause of God's existence.

Perhaps it might be thought that the claim that these theists make is strictly the claim that God is the cause of God's existence. But this cannot be right either. In the causal order, causes are prior to their effects. If God were the cause of God's existence, then, while God's existence would be part of the consequent causal state, it would not be part of the antecedent causal state. So someone making this claim would be committed to the view that, from the antecedent state in which God does not exist, God nonetheless brings it about that the consequent state is one in which God does exist. This is absurd: things that do not exist do not have the power to bring things into existence; and, in particular, things that do not exist do not have the power to bring themselves into existence.

Given that God has no cause, and given that we accept that there is a causal order to which God belongs, there are just two views to consider. On the one hand, it could be that there is an infinite regress in the causal order, and that God exists at every point in this regress. On the other hand, it could be that the causal order has a beginning, and that God exists at every point in the causal order, including the initial point. I take it that the standard view, according to which God is the creator of heaven and earth, takes it that the causal order has a beginning, and that the

causal order begins with God's initial creation of heaven and earth. That is, God's creating of heaven and earth is the first causing. Since God is part of the antecedent state in the first causing, it follows immediately that there is no causing that gives rise to God's existence.

While the view that God has no cause seems relatively unproblematic, the view that God is the cause of pretty much everything else is rather more problematic. True enough, on the picture on which God is the initial cause of heaven and earth, it seems right to say that God is *a* cause of everything in heaven and earth. Moreover, if everything other than God is a denizen of heaven, or earth, or both, then it will also be right to say that God is a cause of pretty much everything other than God. More carefully: setting aside whatever there is that is not a denizen of heaven, or earth, or both, and noting that there is nothing about the initial causal state that is susceptible of causal explanation, it seems right to say that God is *a* cause of everything else. Many theists suppose that God was free not to create; and many of those theists also suppose that, had God not created, then there would have been no causal order, and, indeed, there would have been nothing other than God. The relevant beliefs of these theists are captured in the claim that God is a cause of everything that belongs to causal reality except for the initial causal state.

But, of course, those theists who suppose that God is the creator of heaven and earth also suppose that, when God created heaven and earth, God created things that have causal powers. If we think of the present state of the universe as a causal state, then we can think of the history of our universe as a causal history, involving a causal succession of causal states. If we then consider a particular causal transition between causal states of our universe – or if we focus on a more local causal transition between causal sub-states of the causal states of our universe – we can ask about the causal contribution that theists suppose that God makes to that particular causal transition. If a branch falls from a tree and crushes a child walking below, there is a causal transition from the state in which the branch is still attached to the tree to the state in which the crushed child lies beneath the branch. What contribution do theists suppose that God makes to this causal transition?

One view is that God merely makes the initial causal state of the universe, endowing its constituents with appropriate causal powers, and thereafter need make no further contribution in order for there to be a universe with an evolving causal history. This view admits of various extensions. On one extension, not only need God make no further causal contribution in order for there to be a universe with an evolving causal history,

but, in fact, God makes no further causal contribution. (This extension was taken by many deists, but is accepted by few contemporary theists.) On another extension, while God is not required to make further causal contributions in order for there to be a universe with an evolving causal history, God does, in fact, make causal interventions to further shape that evolving causal history. Christians suppose that the Incarnation is a particularly significant example of this kind of intervention; but most theistic traditions allow that God has worked divers miracles in the course of the causal history of our universe.

Another view is that, in order for there to be a universe with an evolving causal history, there are two kinds of causal contributions that God must make: first, God must make the initial causal state, endowing its constituents with appropriate causal powers; and, second, God must causally underwrite the state transitions that make up the history of the universe. On this latter view, God is both maker and conserver: without the second, conservative causal contribution from God, there would be no causal history. If the second, conservative causal contribution were to cease, then the universe would immediately pass out of existence.[4]

The first view seems to me to be much preferable to the second. In particular, the first view is clearly more theoretically virtuous: there is no data that the second view explains that the first does not, but there are fewer theoretical commitments involved in the first view. Moreover, it seems to me that theists should share this judgement: after all, it would appear to be a greater achievement to make a universe in accordance with the first view than to make a universe in accordance with the second view. Is God such a clumsy artisan that he cannot make a universe that is capable of unsupported existence? (Leftow (2012: 19 n. 44) suggests that there is scriptural support for the second view: Colossians 1:17 says that in God all things hold together, and Hebrews 1:3 says that God is upholding the universe by the power of his word. I think that these passages are more naturally interpreted as reflections of the view that there are powers that seek the destruction of the universe, and that God actively opposes those powers. The powers in question could be supposed to belong to primeval Chaos, but are more plausibly supposed to be the powers of Darkness. If this is right, then these passages give no support to the view that, in the absence of those opposing powers, God

[4] As a reader for the publisher observes, there are more exotic views that might have been mentioned here, e.g. continuous creation and occasionalism. I intend my critical remarks about causal conservation to apply to these other views as well.

would still need to exercise conserving power in order to preserve the universe in existence.)

If we adopt the first view, then there is no sense in which God is an *immediate* cause of the crushing of the child by the tree branch. After all, there is a very long causal chain that stretches from God's initial creative action to the crushing of the child by the tree branch. Moreover, when we talk about 'the cause' of the crushing of the child by the tree branch, we will naturally appeal to such things as the rot in the tree branch and the child's intention to visit the playground. Nonetheless, we might still think that there is some sense in which God is the *ultimate* cause of the crushing of the child by the tree branch. In particular, we might observe that God was the sole cause of the initial state of the universe and the causal powers of its constituents, and that the crushing of the child by the tree branch is one of the causal consequences of the initial state of the universe and the causal powers of its constituents.

Perhaps it might be objected that the view defended in the preceding paragraph depends upon the assumption of causal determinism. I demur. True enough, if the universe is causally deterministic, then God's causing the initial state of the universe and the causal powers of its constituents *causally determined* the crushing of the child by the tree. Moreover, if the universe is not causally deterministic, then God's causing the initial state of the universe and the causal powers of its constituents did *not* causally determine the crushing of the child by the tree. But, equally, if the universe is not causally deterministic, the crushing of the child by the tree is the outcome of the *chancy* causal evolution of the universe. If the evolution of states of the universe is not causally deterministic, then the evolution of states of the universe is the result of two factors: the causal powers of states of the universe and objective chance. Hence, the *ultimate* cause of the crushing of the child by the tree branch involves just two factors: God's causing the initial state of the universe and the causal powers of its constituents, and the subsequent causal evolution of the universe subject to the outplaying of objective chance. So, the outplaying of objective chance aside, God is the *ultimate* cause of the crushing of the child by the tree branch.

Suppose I have wired my gun to an objective chance-generating gadget in such a way that there is a one in ten chance that the gun will fire in any sixty-second time interval in which the gadget is switched on. (If some interpretations of quantum mechanics are to be believed, there are such gadgets: one example is the combination of an appropriately calibrated Geiger counter and a source of radioactivity.) Suppose, further, that I place a bullet in the gun, turn on the gadget and hold the gun to your head

with the intention of turning the gadget off after sixty seconds. Suppose, finally, that the gun discharges after thirty-five seconds, and you die. In this case, despite the fact that chance played a role, it seems correct to say that my actions are *the* cause of your death. True enough, when I put the gun to your head, there was only a 10 per cent chance that, at the end of the minute, you would be dead as a result of the discharging of the gun: my actions certainly did not causally determine your death. Nonetheless, my actions constitute the sole moderately distal cause of your death by gunshot wound to the head.

Something similar seems to be true for the case involving God. Certainly, given only the initial state of the universe and the causal powers of its constituents, it was highly unlikely that this particular tree branch would crush that particular child at this given time. Nonetheless, God's causing the initial state of the universe and the causal powers of its constituents is the sole *ultimate* cause of the child's death. Moreover, the point generalises: God's causing the initial state of the universe and the causal powers of its constituents is the sole ultimate cause of everything that happens in the universe. (In this discussion, I have ignored the possibility that God might make other causal interventions in the course of the history of the universe. Taking this possibility into account plainly makes no difference to the outcome of the discussion: the revised conclusion would be that God's causing the initial state of the universe and the causal powers of its constituents, and God's subsequent interventions in the evolution of the universe, are the sole ultimate causes of everything that happens in the universe.)

It is perhaps worth noting that, even if we agree that God is the sole ultimate cause of everything that happens in the universe, it does not follow that God is the sole cause of everything that happens in the universe, or that God is solely responsible for everything that happens in the universe. The first point is straightforward: God is not a proximate cause for the vast majority of things that happen in the universe, whence it follows immediately that God is not the sole cause of the vast majority of things that happen in the universe. (Perhaps this point is not very interesting if the universe is deterministic. But I think that theists have pretty good reason to suppose that the universe is not deterministic.)[5] The second point is

[5] A reader for the publisher urges that 'many historic Christian theists are committed to the view that the universe is deterministic'. I think that no one who supposes that God intervenes in the history of the universe supposes that the universe is deterministic. Perhaps some theists suppose that causal reality – God plus the universe – is a deterministic system; but it does not follow from this that the universe is a deterministic system.

trickier, and cannot properly be addressed in the absence of a full discussion of freedom. For now, I will just observe that libertarian free actions would be chance events (since any causally non-determined events are, by definition, chance events), and that many people suppose that libertarian free actions are the primary bearers of moral approbation and disapprobation. If there are libertarian free actions, then it seems wrong to suppose that God is *solely* responsible for the libertarian free actions of other agents, *even if* it is true that God is partly responsible for the libertarian free actions of other agents.

7.3 End

There are various ways in which theists may suppose that God is fundamentally connected to ends, goals, purposes and the like. Some theists suppose that there is a sense in which God *is* the end, or goal, or purpose of existence. Some theists suppose that, at the very least, God *models* the end, or goal, or purpose of existence. Some theists suppose that, at the very least, God *sets* the end, or goal, or purpose of existence. Some theists suppose that, at the very least, God is the ultimate *source* of all ends, goals and purposes. In this section, we shall explore each of these suppositions.

The claim that God *is* the end, or goal, or purpose of existence might perhaps be better formulated as the claim that God figures centrally in the end, or goal, or purpose of existence. Some theists say that the end, or goal, or purpose of existence – at least for creatures – is to become one with God. Some theists say that the end, or goal, or purpose of existence – at least for creatures – is to become absorbed into God. Some theists say that the end, or goal, or purpose of existence – at least for creatures – is to achieve, or to dwell in, eternal felicity with God. And so on.

There are hard questions to ask about all of these kinds of claims. Given what God is supposed to be, and given what we are, it is hard to see how we could become one with God, or be absorbed into God, or achieve eternal felicity with God, or the like. If God is infinite and/or perfect and/or simple, and/or impassible and/or incorporeal and/or 'completely other', while we are finite and imperfect and complex and impermanent and corporeal and so forth, then it seems at least *prima facie* impossible that we should become one with God, or be absorbed into God, or achieve eternal felicity with God, or the like. Moreover, the problems here cannot be remedied merely by way of the supposition that, appearances notwithstanding, we are essentially incorporeal and/or essentially

permanent and/or essentially perfectible, and the like. For, even if we accept the idealistic or dualistic assumptions that would be required to underwrite these suppositions, we get no closer to an understanding of how it could be that we become one with God, or are absorbed into God, or achieve eternal felicity with God, or the like. And, in any case, those idealistic or dualistic assumptions are highly problematic: what reason is there to suppose that we *are* essentially incorporeal and/or essentially permanent and/or essentially perfectible, and the like? On the evidence that is available to us, it seems far more plausible to suppose that we are essentially corporeal, and essentially impermanent, and essentially imperfectible, and so on – and so, on the evidence available to us, it seems far more plausible to suppose that it is impossible that we should become one with God, or be absorbed into God, or achieve eternal felicity with God, or the like.

The claim that God *models* the end, or goal, or purpose of existence is also hard to understand. True enough, some theists may suppose that there are things that are true of God that we should aim to make true of ourselves: we should aspire to be wise, and just, and loving, and so forth; but it seems implausible to suppose that there are very many theists who suppose that we should aspire to make ourselves as much like God as we can. Similarly, while some theists may suppose that there are deeds that God performs that we should aim to emulate – i.e. that we should try to perform actions that are kind, and thoughtful, and helpful, and so forth – it seems implausible to suppose that there are very many theists who suppose that we should try to behave as much like God as we can. It is a commonplace amongst theists that God's ways are not our ways: we cannot expect to receive significant guidance about our own ends, or goals, or purposes by treating God as our model. And, in any case, even if it were true that we can receive significant guidance about our own ends, goals and purposes by treating God as our model, it would still fail to be the case that God models the end, or goal, or purpose of (our) existence. Even if we know that we should aspire to be God-like in our deeds and attributes, we are still no closer to knowing the (proper) ends, or goals, or purposes of (our) existence. Moreover, I think, this is true even for those (Christian) theists who suppose that God became incarnate as a human being and lived an exemplary life: even if the life of Christ were exemplary for our deeds and attributes, we could recognise this fact and still be entirely in the dark about the (proper) ends, and goals, and purposes of (our own) existence.

The claim that, while nothing sets ends, or goals, or purposes for God, God *sets* ends, or goals, or purposes for everything else, faces various difficulties. Certainly, if God exists, and conforms to the kinds of view that theists typically have of God, it will be true that there is no other agent who sets ultimate ends, or ultimate goals, or ultimate purposes for God. Whatever ends, or goals, or purposes God may have had in the creation of our universe, God had those ends, and goals, and purposes prior to his creation of all other agents; whence it surely follows that those agents could not have had any role in the setting of *those* ends, goals and purposes for God. Even if it turns out that there are particular and local ends, goals and purposes that God comes to have because of what other agents do, it will not be true that those agents have any role in establishing God's *wider*, or *ultimate*, ends, goals and purposes.

The claim that God sets ends, goals or purposes for everything else – or, at least, for everything else that has ends, goals or purposes – seems rather more problematic. No doubt, there are many theists who suppose that God has ultimate ends, goals and purposes that are served by the creation of a universe in which there are human beings; but I doubt that there is even particularly compelling reason to believe that, if God has ultimate ends, goals and purposes for our universe, then human beings play a central role in those ultimate ends, goals and purposes. The percentage of space-time significantly affected by human beings is utterly negligible: the sheer size of our universe strongly suggests that, if there are ultimate ends, goals or purposes that are served by the universe, human beings do not figure significantly in those ends, goals or purposes. Moreover, this conclusion is not overturned by fine-tuning considerations: if it is true that our universe is fine-tuned for the existence of human beings, it is no less true that our universe is fine-tuned for the existence of amino acids, proteins, viruses, bacteria, plants, animals, ecological niches, asteroids, planets, stars, galaxies, galactic clusters and so forth. Of course, there are many theists who suppose that their scriptures reliably establish that God has ultimate ends, goals and purposes that are served by the creation of a universe in which there are human beings – but it goes without saying that it is controversial whether religious scriptures do contain reliable information about God's ultimate ends, goals and purposes. At the very least, it is clear that the scriptures of the religions of the world do not speak with one voice on the topic of God's ultimate ends, goals and purposes: a survey of the scriptures of the religions of the world is much more plausibly taken to support the conclusion that the scriptures of the religions of the world *collectively* provide no guidance at all to the ultimate divine ends,

goals and purposes that are served by the creation of a universe in which there are human beings.

The claim that God is the *ultimate source* of all ends, goals and purposes will likely seem plausible to most theists for the case of all beings other than God. After all, as we have already observed, most theists suppose that God is the sole ultimate cause of everything that happens in the universe. So, in particular, most theists will suppose that God is the sole ultimate cause of the existence of beings with ends, goals and purposes, and hence the sole ultimate cause of the existence of the *proper* ends, goals and purposes that those beings pursue. True enough, theists might suppose that there are creatures that pursue ends, goals and purposes that are not proper to them, i.e. that are not the ends, goals and purposes that God has created them to pursue. Nonetheless, most theists will agree that even those creatures that pursue ends, goals and purposes other than those that God has created them to pursue would not exist to pursue ends, goals and purposes without God's prior creative activity, and that there would be no ends, goals and purposes for those creatures to pursue without God's prior creative activity.

The claim that God is the ultimate source of *God's* ends, goals and purposes is rather more problematic. True enough, something that already has ends, goals and purposes can set itself further ends, goals and purposes. Perhaps – though this is less clear – there might be something that possesses the capacity to set itself ends, goals and purposes, even though it does not currently have any ends, goals or purposes. But it seems quite doubtful that something that does not already possess the capacity to set itself ends, goals and purposes could give itself the capacity to set itself ends, goals and purposes. Consider, for example, the end, or goal, or purpose, of promoting the good. It seems to me that many theists will suppose that God is intrinsically such that God has this end, or goal, or purpose: God neither gives itself the capacity to set itself this end, or goal, or purpose, nor sets this end, or goal, or purpose for itself. But if God is intrinsically such that God has certain ends and goals and purposes, then it is not true that God is the ultimate *source* of God's possession of those ends and goals and purposes.

Collecting together the threads of this discussion, it seems that theists can say at least this much: there is nothing else that *sets* ultimate ends and goals and purposes for God, and God is the *source* of ultimate ends and goals and purposes for everything other than God that has ends and goals and purposes. But the other claims floated at the beginning of this section are, at best, implausible and, at worst, plainly mistaken.

7.4 Value

There are various ways in which theists might suppose that values are connected to God. Some theists suppose that values are grounded in God. Some theists suppose that values have their source in God. Some theists suppose that values originate with God. Some theists suppose that God provides the measure for values. In this section, we provide a preliminary assessment of these kinds of suppositions.

The claim that all values are *grounded* in God seems implausible on its face. There are many kinds of values – including moral, ethical and aesthetic values – of which it seems plausible to claim that their instances are not *fundamental* properties of our universe: they are not, for example, properties *of* quantum fields on manifolds. Of course, there are philosophers who deny that there are moral, ethical and aesthetic properties, and there are philosophers who, while they accept that there are moral, ethical and aesthetic properties, deny that any of these properties are instantiated in our universe. However, those philosophers who accept that moral, ethical and aesthetic values are instantiated in our universe should, it seems to me, also accept that those instances of moral, ethical and aesthetic values are grounded in something like a field-bearing manifold. We can spell out the idea here in terms of duplication: if our universe is fundamentally a field-bearing manifold, then any duplicate of that field-bearing manifold would ground exactly the same pattern of instantiation of moral, ethical and aesthetic values.

I anticipate that some theists will demur. On their view, while it may be true that a duplicate of our field-bearing manifold would ground exactly the same pattern of instantiation of moral, ethical and aesthetic values *in the presence of God*, a duplicate of our field-bearing manifold would not ground the instantiation of any moral, ethical or aesthetic values *in the absence of God*. I confess to finding this view unbelievable. Given that there are moral, ethical and aesthetic values instantiated in our universe, it seems to me that we should accept that at least some of those instantiations of moral, ethical and aesthetic values are grounded entirely in our universe. If the Taj Mahal is beautiful, then the beauty of the Taj Mahal is grounded entirely in our universe: it is beautiful quite apart from how things stand with God. If Sydney Sparkes Orr was guilty of gross moral turpitude, then the guilt of Sydney Sparkes Orr is grounded entirely in our universe: he was guilty of gross moral turpitude quite apart from how things stand with God. If an examined life can be worth living, then the value of an examined life can be grounded entirely in our universe: an examined life can be worth living quite apart from how things stand with God. And so on.

I imagine that some theists might respond to the claims just made with the assertion that there just is no saying how things are apart from God. After all, if the Taj Mahal is beautiful, then God knows that the Taj Mahal is beautiful; and if Sydney Sparkes Orr was guilty of gross moral turpitude, then God knows that Sydney Sparkes Orr was guilty of gross moral turpitude; and if an examined life can be worth living, then God knows that an examined life can be worth living. However, I think that this response misses the main point. Even if it is true that the Taj Mahal is beautiful only if God knows that the Taj Mahal is beautiful, the beauty of the Taj Mahal is not grounded in God's knowledge that the Taj Mahal is beautiful. If God knows that the Taj Mahal is beautiful, this can be only *because* the Taj Mahal is beautiful; it cannot be that the beauty of the Taj Mahal is even partly grounded in God's knowledge that the Taj Mahal is beautiful.

Perhaps some theists may be inclined to bite the bullet here: despite the countervailing considerations, all instantiations of values are grounded in God's judgements about the values of things: the Taj Mahal is beautiful only because God judges that the Taj Mahal is beautiful; and Sydney Sparks Orr was guilty of gross moral turpitude only because God judged that Sydney Sparkes Orr was guilty of gross moral turpitude; and an examined life can only be worth living if God judges that an examined life can be worth living; and so on. However, I do not think that theists can reasonably suppose that all instantiations of values are grounded in God's judgements about the values of things. In particular, those theists who suppose that God possesses aesthetic, ethical and moral attributes would thereby be committed to the claim that God's possession of those aesthetic, ethical and moral attributes is grounded in God's judgements about his own value. But surely that cannot be right: theists don't think that God is beautiful *just because* God self-ascribes beauty; and theists don't think that God is good *just because* God self-ascribes goodness; and theists don't think that God is loving *just because* God self-ascribes lovingness; and so on. Rather, theists think that God self-ascribes beauty because God is (intrinsically) beautiful; and theists think that God self-ascribes goodness because God is (intrinsically) good; and theists think that God self-ascribes lovingness because God is (intrinsically) loving. Moreover, once we have seen that theists are committed to the claim that there are instantiations of value that are not grounded in God's judgements about the values of things, we have good reason to expect that theists will concede that, for example, the beauty of the Taj Mahal is not grounded in God's judgement that the Taj Mahal is beautiful.

There may be some theists who wish to argue that, while instantiations of values may be grounded in the universe, the values themselves require grounding in God. So, for example, while it may be conceded that the beauty of the Taj Mahal is grounded solely in the universe, nonetheless beauty itself is grounded in God. While I am not sure that I understand what it would be for beauty – as opposed to instantiations of beauty – to be grounded, I think that this response must fall to the same kind of objection that was developed in the previous paragraph. If God is beautiful – where this is a matter of God's instantiation of beauty itself – then it cannot be that beauty itself is grounded in God. In particular, it is surely incoherent to suppose that beauty itself is grounded in God's instantiation of beauty. (Of course, some theists may wish to play on by appealing to the doctrine of divine simplicity. But – as I argued in Chapter 4 above – the relevant versions of the doctrine of divine simplicity are incoherent. There is no way that truth-maker versions of the doctrine of divine simplicity can be used to support the position currently under attack.)

The claim that God is the *source* or *origin* of all values is also implausible on its face. Certainly, we can make sense of the idea that God is the ultimate source of all instantiations of value in our universe. After all, as we noted in section 7.2 above, we can make sense of the idea that God is the sole ultimate source of our universe: and if God is the sole ultimate source of our universe, then God is the sole ultimate source of all instantiations of value in our universe. But, in line with that earlier discussion, we should be prepared to allow that God is not the sole source of instantiations of value in our universe: for, very often, God is not a proximate cause of instantiations of value in our universe. Many theists will suppose that there are instantiations of value in our universe that are the result of libertarian free choices and actions of human agents: and, in those cases, it is the human agents who are the sources of the instantiations of value in question.

Even if it were insisted that, the considerations advanced in the preceding paragraph notwithstanding, God is the sole source of instantiations of value in our universe, it is clear that theists would be committed to denial of the claim that God is the ultimate source of all instantiations of value. For, in particular, theists suppose that God instantiates various values: God is beautiful, God is good, God is loving and so forth. But it cannot be the case that God is the *source* of God's beauty, and goodness, and lovingness: it cannot be that God causes God to be beautiful, and good, and loving, and so on. Here, I take for granted that, if God is beautiful and good and loving, then God is essentially beautiful and good and loving. (I assume that these are claims that very few theists wish to reject.) If God is essentially beautiful and good and loving, then there is no point in the

causal order in which God lacks these properties. But if there is no point in the causal order at which God lacks these properties, then there is no point in the causal order at which God causes God to have these properties. So, as I said, it cannot be that God is the source of God's beauty, and goodness, and lovingness, and so forth.

The claim that God provides a *measure* for all values is no more plausible than the previous two claims that we have examined. As in other cases, the target claim breaks into two halves. First, there is the claim that God provides a measure for all instantiations of value in all things other than God; and, second, there is the claim that God provides a measure for all of the instantiations of value in God.

If we suppose that God is a perfect – or maximal, or optimal – exemplar of all values, then we can accept the claim that God is a measure for all instantiations of value in all things other than God: the beauty and goodness and lovingness of all things other than God can be measured against the example that God sets. Of course, this proposal is threatened if there are reasons for thinking that God cannot be a perfect exemplar of *all* values. One reason for caution here is that one might suspect that there are incompatibilities between perfect – or maximal, or optimal – exemplifications of distinct values. But, even on the (controversial) assumption that there are no incompatibilities between perfect exemplifications of distinct values, there are further difficulties in the thought that God is a measure for all instantiations of value in all things other than God.

Consider the claim that Gary Ablett is an excellent footballer. This claim makes a value attribution concerning Gary Ablett: it entails, at the very least, that Gary Ablett is *good at* playing football. Should we suppose that God is a perfect – or maximal, or optimal – exemplar of the value in question? I do not think so. While there is no record, in any of the scriptures of any of the religions of the world, attesting to God's proficiency at football, I doubt that there are any theists who wish to claim that God is a perfect – or maximal, or optimal – footballer. Moreover, what goes for football goes for many other human pursuits and artefacts that are subject to evaluation: musical performances, dramatic performances, buildings, sculptures, paintings, dances, novels, poems, films, songs and so forth. If, for example, we suppose that *A Man without Qualities* is excellent, and if we suppose that God is a measure for its value, then we need to provide an account of what it is about God that provides the measure in question. But, at the very least, it is very hard to see how any such account could be provided.

Even if we suppose that the worries that we have aired are groundless and that God *is* a measure for all instantiations of value in all things other than God, we have still to face the difficulties that confront the claim that

God is a measure for all instantiations of value in God. For, while it makes sense to suppose that we can assess the value of things other than God by comparing them with God, it makes no sense to suppose that we can assess the value of God by comparing God with God. The point here is not that, on the assumption that God is a measure for all instantiations of value in all things other than God, we are unable to make any claims about the value of God; rather, the point is that, if we are to make claims about the value of God, we cannot suppose that those claims are underwritten by the same kind of comparison that we (allegedly) use in order to substantiate claims about the value of anything other than God. But, if we allow that we can get a handle on the value of God in some way that does not require us to make a comparison between God and something else, then it is hard to see why we should not also allow that we can get a handle on the value of other things in exactly the same kind of way. At least in theory, we *could* estimate the value of other things by comparing them to God; but there is no reason to suppose that we are obliged to estimate the value of other things in this way; and there is no reason to suppose that the value of other things is determined by the way in which those other things measure up to God.

7.5 Permanence

The idea that only God is *permanent*, while everything else is *impermanent*, is common to many theistic traditions. A related idea, also found in many theistic traditions, is that, while God is *enduring*, many other things are *transient*. I begin with an attempt to explicate this pair of distinctions.

There are various aspects that are standardly taken to contribute to God's permanence and/or endurance.

First, there is God's *duration*. If God is temporal, then God exists at all moments of time. If God is timeless, then God exists in eternity. If God exists at all moments of time, then God exists sempiternally or everlastingly. If God exists in eternity, then it is unclear exactly how we should conceive of eternity. Some theists think of eternity as something like a parallel, or independent, time series; other theists think of eternity as a domain which lacks any of the structure that is associated with time: metric, order and so forth. As noted in Chapter 5, there are difficulties that arise on all conceptions of God's relationship to time.

Second, there is God's *modality*. Many theists suppose that God is necessary. God's necessity is usually taken to apply both to God's existence and (hence) to God's essential properties. If God exists of necessity, then it is impossible that God not exist. At the very least, if God's existence is

necessary, God exists at all points in any possible variation of the causal order. Some suppose that God exists at all points in any possible variations of a more encompassing metaphysical or logical order; others suppose that there is no more encompassing order than the causal order. If God exists of necessity, then, as noted above, God's essential properties are all possessed by God of necessity. (Of course, if God exists contingently, then the exemplification of God's essential properties – i.e. the exemplification of God's essence – is contingent upon God's existence.)

Third, and more controversially, there is God's *status*. Some theists – including many classical Christian theists – suppose that God is impassible. If God is impassible, then God is not subject to change: God remains always or eternally the same. If God is impassible, then there are no causal transitions within God, and there are no external causal impacts on God. If God is impassible, then God does not deliberate prior to creation: there is no succession of states in God that precedes creation. Moreover, if God is impassible, then God is unaffected by anything that happens in our universe, or elsewhere in God's creation. In particular, if God is impassible, then God is not affected by our suffering (which is not to say that God does not know about our suffering, nor to say that God is indifferent to our suffering).

I take it that God's *permanence* is standardly taken to encompass all of God's duration, modality and status: if God is permanent then God is eternal, necessary and impassible. On this standard (classical) conception, God inhabits a domain that lacks any of the structure associated with time, exists and possesses all of God's essential properties with necessity, and is impassible. Given this standard (classical) conception of God, there is a clear contrast between God and everything else: for, at least by the lights of those who endorse this standard (classical) conception, there is nothing else that inhabits eternity, exists and possesses all of its essential properties of necessity, and is impassible.

I take it that God's *endurance* is standardly taken to encompass just God's duration and modality: if God is enduring, then God exists at all moments of time and at all points in any possible variation of the causal order, and possesses all of God's essential properties at all points in any possible variation of the causal order. Given this conception of God, it is not so evident that there is a clear contrast between God and everything else: for, at least by the lights of naturalists like me, the universe is something that exists at all moments of time and at all points in any possible variation of the causal order, and the natural universe possesses all of its essential properties at all points in any possible variation of the causal order. Of course, no theists will accept this naturalistic vision of the universe – since theists who accept

that God endures will suppose, for example, that there is a non-trivial part of the causal order in which God deliberates about which universe to create, and (perhaps) that God is free to choose not to create the universe – but it is not entirely out of the question that some theists might think that the universe is *close* to being an enduring entity.

The idea that God is *permanent* has most attraction – at least among Christian theists – for those who are drawn to the God of Athens, i.e. to the God of the philosophers. This conception of God is remote from the God of popular religion, except insofar as the God of popular religion is taken to be 'mysterious', and 'utterly other'. In particular, this conception of God struggles to make room either for divine freedom or for divinely significant human freedom. However, this conception of God certainly accentuates respects in which God is more fundamental than the universe.

The idea that God is *enduring* has, I think, more attraction – at least among Christian theists – for those who are drawn to the God of Jerusalem, i.e. to the God of popular religion. Whether this attraction is deemed to be a genuine advantage depends, at least in part, on the view that one takes towards the introduction of anthropomorphic elements into the conception of God. Moreover, this conception of God diminishes the extent to which God is more fundamental than the universe.

7.6 Concluding remarks

Gathering together all of the threads of the preceding discussion, I suggest the following summary of what it is reasonable for theists to claim about the fundamentality of God. First, while nothing grounds God, God does not ground much else. Second, while nothing causes God, and while God is the sole *ultimate* cause of everything else, God's causal role in everything else is often quite minor. Third, while nothing sets ultimate ends and goals and purposes for God, and while God is the source of the ultimate ends and goals and purposes of everything else, God's role in setting ends and goals and purposes for everything else is often quite minor. Fourth, while God provides a model for many significant values, God is not the ground, or the source, or the measure, of value. Fifth, whether we should suppose that God is permanent or enduring depends upon other features that we wish for our conception of God.

CHAPTER 8

Omni-attributes

As I noted in Chapter 1, there are many monotheists who suppose that the god in which they believe possesses one or more omni-attributes: omnipotence, omniscience, omnipresence and so forth. I suppose that there could be argument about the composition of this list – for instance, some may suppose that there are omni-attributes that have not yet been mentioned. However, I do not propose to consider this question here. Instead, I shall simply consider the three omni-attributes that I have listed here, with a primary focus on the first two.

8.1 Omnipotence

The analysis of the concept of omnipotence proves to be an extraordinarily difficult topic. I shall begin by noting difficulties with suggested analyses that might come to mind first. Then, I shall move on to consider the most widely defended current analyses of omnipotence. Finally, I shall offer my own suggestion about how the concept of omnipotence ought best to be understood.

8.1.1 Some initial moves

A natural first attempt at a definition of omnipotence is to claim that, necessarily, a being is omnipotent iff there is nothing it cannot do. That is, *necessarily, a being is omnipotent iff, for any action A, that being can do A.* While there have been philosophers who have accepted this account of omnipotence, there are obvious objections to be raised against it. In particular, since no constraints have been placed on the actions in question, it follows from this account that an omnipotent being can perform actions that it is logically impossible for any being to perform: for example, that an omnipotent being can make 1 + 1 = 3, etc.

In the light of the above objection, there is an obvious adjustment to be made to the definition: *necessarily, a being X is omnipotent iff for any action A that it is logically possible for some being to perform, X can do A.* With careful interpretation, it is not obviously implausible to suppose that this is a correct analysis of omnipotence. However, there are at least *prima facie* difficulties that must be overcome. Consider, for example, the action of scratching one's own nose. No being that lacks a nose can do this, though countless beings that have a nose can. If we take this to be grounds for supposing that an omnipotent being must have a nose, then it seems that similar examples will lead us into serious trouble. For consider the action of raising all three of one's arms, and the action of raising all four of one's arms. Only a being with three arms can do the former. Only a being with four arms can do the latter. No being can do both. (For another example along similar lines, consider the action of making something that is too heavy for its maker to lift but not so heavy that no being can lift it.)

In order to save the definition from these kinds of counter-examples, a natural thought is to try to place some restrictions on the class of actions that is quantified over in the definition. If we restrict the class of actions that is quantified over to what might be called actions *de re* – and do not extend it to include actions *de se* and actions *de dicto* – then the kinds of worries that we have just been considering might be averted. Consider again the case of noses and their scratching. Suppose that there is a being that can scratch each and every nose that there is. If that being has a nose, then it can scratch its own nose; if that being does not have a nose then, of course, it cannot scratch its own nose (since it does not have a nose to scratch). If we restrict out attention to acts of scratching noses *de re* – and ignore the question of acts of scratching noses *de se* – then there are no limitations on the power of our being when it comes to the question of scratching noses.

So our revised suggestion is to try the following definition: *necessarily, a being X is omnipotent iff for any* de re *action A that it is logically possible for some being to perform, X can do A.* Of course, this suggestion leaves us with the obligation to explain exactly what is meant by a *de re* action: the discussion to this point can hardly be said to constitute an explanation of this matter. However, it is not *obviously* hopeless to think that a satisfactory explanation can be provided.

Even if we can simply resolve to abjure descriptions of actions that introduce involvement with *de se* actions and/or *de dicto* actions, there are many further questions about this analysis that remain to be faced. In particular, we need to be told more about the interpretation of the final 'X can

do A'. Plainly, this is not to be interpreted as saying that it is logically possible for X to do A. After all, even if it turns out that, for any *de re* action A that it is logically possible for some being to perform, it is logically possible for me to do A, it plainly is not the case that I am omnipotent. More generally, the crucial point is that omnipotence in a world concerns the powers that are possessed in that world, and not merely actions that it is logically possible are performed in logically distant worlds in which different powers are possessed.

A natural suggestion to make at this point is that what is required for it to be the case that X can do A is that it is actually within X's power to do A. So, roughly, in all of the nearest worlds to the actual world in which X tries to do A, X succeeds in doing A. (Perhaps we should also add that in all the nearest worlds in which X tries not to do A, X succeeds in not doing A.) Putting this in the vocabulary of counterfactuals: it is within X's power to do A just in case (1) if X were to try to do A then X would do A; and (2) if X were to try not to do A then X would not do A. (Perhaps we should also add: (3) if X were not to try to do A, then X would not do A.) Given the notorious difficulties that arise for analyses that invoke counterfactuals, we might consider weakening the analysis so that it adverts not merely to the nearest worlds, but to all sufficiently nearby worlds. However, we began by suggesting that what follows would be rough: it is enough that we have some kind of gesture towards what is meant by the claim that it is actually within X's power to do A.

Our analysis has grown more complex: it is now indexed to the possible world in which X is located. (*A being X is omnipotent in world w iff for any* de re *action A that it is logically possible for some being to perform, it is within X's power in w to do A*.) Even so, this analysis may well not be complex enough; in particular, it might be that more indexing is required. Consider, for example, the action of reducing the powers of the most powerful being in the world. It might be that a being that was omnipotent at one time could perform this action and that, in consequence, that being would cease to be omnipotent at later times. Even if this is not a possibility, it is not clear that it is something that ought to be ruled out by our initial formulation of our definition of omnipotence. So there is at least some reason to move to the following definition: a being *X is omnipotent at time t in world w iff for any* de re *action A that it is logically possible for some being to perform, it is within X's power at t in w to do A*.

But this still won't do. We have mixed up quantification over worlds with primitive modal vocabulary: the result is junk. A tempting example of the kind of objection that this confusion prompts is this: consider

the action of killing Bertrand Russell. There is a possible world in which Wittgenstein does this during a heated argument about the ownership of a poker. But it is not a requirement on omnipotence that an omnipotent being have it within its power to kill Bertrand Russell at a time in a world at which Russell does not exist.

Perhaps we might think that we can fix the immediate problem by further limitations on the class of actions over which we quantify. Not just any old *de re* actions will do; rather, we must restrict ourselves to *de re* actions for which all of the *res* in question exist at t in w. One way to achieve this result is to amend the definition in the following way: *X is omnipotent at time t in world w iff for any* de re *action A that it is logically possible for some being to perform at time t in world w, it is within X's power at t in w to do A*. (Clearly enough, on this amended definition, an omnipotent being is only required to be able to kill Bertrand Russell in worlds and at times at which it is logically possible to kill Bertrand Russell; and worlds and times at which Russell does not exist do not fall into this category.)

But this amended definition is still junk. A first step towards repair is the following: *X is omnipotent at time t in world w iff for any* de re *action A that it is logically possible for some being to perform in the circumstances C that obtain at time t in world w, it is within X's power at t in w to do A.* We are still mixing up quantification over worlds with primitive modal vocabulary – but now it seems that the primitive modal vocabulary can be eliminated. *X is omnipotent at time t in world w (in which circumstances C obtain) iff for any* de re *action A, world w' and time t', if C obtains at t' in w' and some being does A in w' at t', then it is within X's power at t in w to do A*.

Although we now have something that is not junk, it still seems that we do not have a satisfactory analysis. The problem is that we have no account of how the circumstances that obtain in a world at a time may be characterised. If, for example, the circumstances may be said to be such that no being other than X exists, and if X is essentially limited in its powers, then it is compatible with this definition that a being that has next to nothing within its power is omnipotent.

What to do? One suggestion that we plainly ought to resist is the proposal to amend the definition to read: *necessarily, a being X is omnipotent iff for any* de re *action A that it is logically possible for X to perform, X can do A.* Given our account of 'X can do A', this definition is not trivial; but it faces the apparently insurmountable problem that it allows that a being can be omnipotent while being *essentially* unable to perform classes of actions that other beings are able to perform. Indeed, as a limiting case,

a being that is essentially unable to perform any actions will trivially count as omnipotent on this amended definition. But any analysis that entails that trees and rocks and specks of dust are (trivially) omnipotent is surely a flawed analysis.

Perhaps what is required is something like this. *X is omnipotent at time t in world w iff for any* de re *action A that can be performed by a mate of X at time t in a world w' that shares the same history as w up to t, it is within X's power to do A at t in w*. A *mate* of X must have exactly the same powers as X prior to t, but can have any logically permissible powers at t. A mate of X is not required to share any of the essential properties that X possesses, or any of the intrinsic properties that X possesses prior to t. Any miraculous transformation of X is permitted; however, the power of any mate of X is limited by location in the causal order and by logic. So, for example, at any time, there is a mate of mine who can levitate the Pentagon, and there is also a mate of mine who can bring the universe to an instantaneous end. But there is no mate of mine at any time who can change the past or square the circle.

There are still difficulties. As is often the way when one tries to produce an analysis of a concept, the analysis seems to grow ever more complicated, and yet the apparent counter-examples continue to flow. Perhaps then, rather than continuing to pursue this frontal line of attack, it will repay us to consider a different strategy. There are various recent sophisticated analyses of omnipotence that may succeed where we seem to be failing. At any rate, we can hardly do worse than we have done so far if we turn to consider these analyses.

8.1.2 *Hoffman and Rosenkrantz*

Joshua Hoffman and Gary Rosenkrantz – Rosenkrantz and Hoffman (1980), Hoffman and Rosenkrantz (1988), Hoffman and Rosenkrantz (2002b) – provide the following analysis of omnipotence. (I have preserved their own – perhaps sometimes unfortunate – formulations and formalism, except for the introduction of the term 'suitable' as a handy label for a sub-class of states of affairs that they define but do not name):

Def^{n}: x is *omnipotent at t* iff for all suitable states of affairs that s, if it is possible for some agent to bring it about that s, then at t x has it within its power to bring it about that s.

Def^{n}: A state of affairs that s is *suitable* iff it satisfies the following condition: either (1) the state of affairs that s is unrestrictedly repeatable, and

of the form 'in n minutes, p', and if the state of affairs that p is a complex state of affairs, then each of the parts of the state of affairs that p is unrestrictedly repeatable and possibly brought about by someone; or (2) the state of affairs that s is of the form 'q forever after', where the state of affairs that q is a state of affairs that satisfies (1).

Def^{n}: A state of affairs that s is *unrestrictedly repeatable* iff the state of affairs that s is such that: $\forall n \exists t_1 \ldots \exists t_n$ (($t_1 < \ldots < t_n$ are periods of time which are sufficient intervals for the state of affairs that s, and the state of affairs that s obtains at t_1, and the state of affairs that s does not obtain at t_2, and the state of affairs that s obtains at t_3, and …, and the state of affairs that s obtains at t_n) $\leftrightarrow$ n is odd).

Def^{n}: A period of time t is a *sufficient interval* for a state of affairs that s iff the state of affairs that s is such that it is possible that s obtains throughout a time period which has the duration of t.

Claim: Necessarily, for any state of affairs that s, if an agent a brings it about that s, then either s is an unrestrictedly repeatable state of affairs that it is possible for some agent to bring about, or else a brings it about that s by bringing it about that q, where the state of affairs that q is an unrestrictedly repeatable state of affairs that it is possible for some agent to bring about.

There are various kinds of criticisms that can be made of this account of omnipotence. On the one hand, there are technical questions to be raised concerning the formulation and interpretation of the account. On the other hand, there are serious questions to be raised about the adequacy of the account. These questions concern both the conformity of the account to pre-theoretic intuitions concerning the abilities of an omnipotent being, and the choice of primitive concepts that are used in the account. Owing to limitations of space, we shall pursue only some of the questions that might be asked under these various headings.

8.1.2.1 Parts of states of affairs

The definition of suitability relies on the notion of a *part* of a state of affairs. Here is how Rosenkrantz and Hoffman explain this notion:

> Intuitively, a complex state of affairs is any state of affairs which is either constructible out of other states of affairs by use of the logical apparatus of first-order quantification theory enriched with whatever modalities one chooses to employ, or else analysable into states of affairs which are so constructible. The components of a complex state of affairs, s, are those states of affairs out of which s, or s's analysis, is constructible. For example, the state of affairs, Oscar is tall and strong, is either identical with, or analysable

> into, the following conjunctive state of affairs: Oscar is tall & Oscar is strong. Similarly, the state of affairs, Oscar is not tall, is either identical with, or analysable into, the state of affairs, Oscar exists & ~ (Oscar is tall).

There are many questions not answered by this passage. However, it is clear that Rosenkrantz and Hoffman commit themselves to both conjunctive states of affairs and to negative states of affairs. Hence, it seems a reasonable conjecture that they will allow disjunctive states of affairs. But consider the following disjunctive state of affairs: *in ten minutes, either there is just one F but (after two more minutes) there is never again just one F, or there are just two Fs but (after two more minutes) there are never again just two Fs, or there are just three Fs, but (after two more minutes) there are never again just three Fs, or … or (after two more minutes) there are just n Fs but there are never again just n Fs, or …*. Clearly, this state of affairs is unrestrictedly repeatable. (Suppose that an agent brings it about that there is one F, and then no Fs, and then two Fs, and then no Fs, and then three Fs, and then no Fs, etc., with appropriate time intervals for the existence and non-existence of Fs. Then the state of affairs in question will be unrestrictedly repeated.) Moreover, this state of affairs is not suitable – because it is complex and yet has parts that are not unrestrictedly repeatable – and it is not a state of affairs that can be brought about by an agent's bringing about of some other unrestrictedly repeatable state of affairs. So this is a counter-example to the analysis of Rosenkrantz and Hoffman: there are states of affairs which it should be possible for omnipotent beings to bring about but which this analysis does not require omnipotent beings to have the power to bring about.

Once the trick is seen, it will be noted that there are simpler examples that can be used to make the same kind of point. For instance, consider the following state of affairs: *in ten minutes, either Parmenides lectures and Plato sleeps forever after, or Plotinus lectures and Aristotle sleeps forever after*. This state of affairs is not suitable – because it is complex and yet has parts that are not unrestrictedly repeatable – and it is not a state of affairs that can be brought about by an agent's bringing about of an unrestrictedly repeatable state of affairs. So, even though this state of affairs is plainly a state of affairs that an omnipotent being ought to be able to bring about, the analysis of Rosenkrantz and Hoffman does not require that an omnipotent being be able to bring it about. However, while these examples do point to *a* flaw in the analysis of Rosenkrantz and Hoffman, it is plausible to suggest that this puncture can be easily patched.

Perhaps what we need is a *revised definition of suitability*. First, a state of affairs s is *suitable* iff it is either of the form *in n minutes p* or the form *in n minutes p forever after*, where p is *happy*. Second, a state of affairs is

happy iff it satisfies the following recursive definition: (1) all unrestrictedly repeatable atomic states are happy; (2) all state of affairs of the form 'in n minutes p' where p is happy are themselves happy; (3) all states of affairs of the form 'p forever after' where p is happy are themselves happy; (4) all states of affairs all of whose parts are happy are themselves happy. With this revised definition of suitability, it seems that we can handle even the more complex case mentioned initially – for, under this revised definition, both problematic states of affairs now count as suitable.

Perhaps there is a different way of effecting a patch. Consider the following state of affairs (suggested by the discussion in the previous paragraph): *in ten minutes, there will be one F for ten minutes, and then no Fs for ten minutes, and then two Fs for ten minutes, and then no Fs for ten minutes, and then three Fs for ten minutes, and then no Fs for ten minutes, and then …, and then n Fs for ten minutes, and then no Fs for ten minutes, and then …* One way in which this state of affairs could be brought about is via the bringing about of many states of affairs, each of which satisfies the conditions for suitability: in ten minutes, there will be one F for ten minutes; in twenty minutes, there will be no Fs for ten minutes; in thirty minutes, there will be two Fs for ten minutes; in forty minutes, there will be no Fs for ten minutes; etc. So the suggestion is that the claim that Rosenkrantz and Hoffman make should be replaced by the following claim: *Necessarily, for any state of affairs that s, if an agent a brings it about that s, then either s is a suitable state of affairs that it is possible for some agent to bring about, or else a brings it about that s by bringing it about that the states of affairs that* q_1*, that* q_2*, …, that* q_n*, …, obtain, where each of the states of affairs that* q_i *is a suitable state of affairs that it is possible for some agent to bring about.* Given this claim, we can further restrict the class of states of affairs that is quantified over in the definition of omnipotence.

8.1.2.2 Bringing about the past

Both the revised and unrevised versions of the Rosenkrantz and Hoffman account of omnipotence depend upon numerous controversial metaphysical assumptions. The account is carefully crafted to ensure that an omnipotent being is not required to be able to bring about the past – and so those who think that it is possible to bring about the past will have reason to be dissatisfied with it. Moreover – and this is the point upon which we shall now focus – the means whereby it is ensured that an omnipotent being is not required to be able to bring about the past has consequences for other controversial metaphysical claims. Consider, for example, a state of affairs in which Wittgenstein hits Russell with a poker. While Wittgenstein and Russell were alive, this is a state of affairs that an omnipotent being

ought to have been able to engineer. Moreover, while they were alive, it seems that this state of affairs should have qualified as *suitable*: after all, Wittgenstein could hit Russell with a poker over and over again. However, now that Wittgenstein and Russell are dead, it might – for all that we know – be metaphysically impossible for this state of affairs ever to be realised again. Of course, an omnipotent being could make perfect replicas of Wittgenstein and Russell, and have the former hit the latter with a poker – but that would not be a state of affairs in which *Wittgenstein* hits *Russell* with a poker. And, in that case, it should not follow that a being fails to be omnipotent because it cannot bring about the state of affairs in which Wittgenstein hits Russell with a poker – even though this *is* a consequence of the Rosenkrantz and Hoffman analysis of omnipotence!

The example that I have chosen is controversial. If you think that Wittgenstein and Russell are really immortal immaterial souls who could be reincarnated in appropriate bodies, then you will think that the example fails. But there was nothing in the form of the example that relied upon the choice of *people* as the objects in question. Consider, instead, a state of affairs in which the Colossus of Rhodes is polished with a chamois. There was a time when someone could have done this. But now that the Colossus of Rhodes has been utterly destroyed, not even an omnipotent being can bring it about that the Colossus of Rhodes is polished with a chamois unless it is metaphysically possible for the Colossus of Rhodes to be put back together again. Yet whether this is possible arguably depends upon the nature of the microphysical constitution of the universe: if there is no microphysical level at which all of the constituents of the Colossus of Rhodes have been preserved, then there is at least some *prima facie* plausibility to the claim that an omnipotent being could do no more than make a replica of the Colossus of Rhodes. Moreover, even if you think that this example also fails, you should surely have qualms about tying the analysis of omnipotence to plainly controversial metaphysical views about the identity of objects over time.

8.1.2.3 Universal annihilation

Controversial metaphysics enters into the analysis of Rosenkrantz and Hoffman in other more serious ways. Consider, for example, the state of affairs of *annihilating everything*; or, if you think that that is not a logically possible state of affairs, consider instead the state of affairs of *annihilating the spatio-temporal manifold and all its contents*. An omnipotent being should surely be able to bring time to an end. But it is not obvious that there is any way of tweaking the analysis that is offered by Rosenkrantz and Hoffman in order to accommodate this point. Annihilating everything is

not unrestrictedly repeatable; and nor is it at all obvious how the state of affairs of there being nothing at all could be brought about by means of the bringing about of a state of affairs that is unrestrictedly repeatable.

Perhaps it might be said that the state of affairs of there being nothing at all – or the state of affairs in which there is no time – is a state of affairs in which there is nothing *forever after*. However, even if this claim were allowed to stand, it would not save the analysis offered by Rosenkrantz and Hoffman, since it is not the case that there being nothing forever after – or there being no time forever after – is ultimately analysable in terms of an unrestrictedly repeatable state of affairs. Even on the amended account of suitability that we proposed above, it remains the case that any suitable state of affairs must be composed of, or analysed in terms of, unrestrictedly repeatable *atomic* states of affairs. At the very least, it is hard to see how bringing time to an end could be analysed in terms of the performance of some action that could be repeated at indefinitely many future times, or the bringing about of some state of affairs that could obtain at indefinitely many future times.

8.1.2.4 Unrestricted repeatability

The definition of unrestricted repeatability is stronger than required. As formulated by Rosenkrantz and Hoffman, it requires the assumption that either it is possible for time to have no beginning, or else it is possible for time to have no end, so that it is possible for time to be infinite. Using the rather dubious formalism upon which Rosenkrantz and Hoffman rely, this amounts to the assumption that: $\exists w \forall n\ \exists t_1 \ldots \exists t_n\ \ldots\ [(t_1 < \ldots < t_n \ldots$ are periods of time which are sufficient intervals for the state of affairs that s, and the state of affairs that s obtains at t_1, and the state of affairs that s does not obtain at t_2, and the state of affairs that s obtains at t_3, and …, and the state of affairs that s obtains at t_n) $\leftrightarrow$ n is odd]. But it would suffice for the definition merely to have: $\forall n \exists w\ \exists t_1 \ldots \exists t_n\ [(t_1 < \ldots < t_n$ are periods of time which are sufficient intervals for the state of affairs that s, and the state of affairs that s obtains at t_1, and the state of affairs that s does not obtain at t_2, and the state of affairs that s obtains at t_3, and …, and the state of affairs that s obtains at t_n) $\leftrightarrow$ n is odd]. On the Rosenkrantz and Hoffman formulation, opponents of completed infinities are unable to accept their analysis of omnipotence; on the proposed revision, this is not the case.

8.1.2.5 Free decision

The account that Rosenkrantz and Hoffman offer of the parts of complex states of affairs allows that the parts of an analysis of a state of affairs are

parts of that state of affairs. This allowance does real work for Rosenkrantz and Hoffman in their argument for the conclusion that the state of affairs in which Plato freely decides to write a dialogue is not suitable. On their account, this state of affairs can be analysed as a conjunction of three states of affairs: (1) Plato's deciding to write a dialogue; (2) there being no antecedent sufficient causal condition of Plato's deciding to write a dialogue; and (3) there being no concurrent sufficient causal condition of Plato's deciding to write a dialogue. However, on their account, (2) is a state of affairs that is not possibly brought about by anyone, since it is a state of affairs entirely about the past.

There are various reasons for being worried about Rosenkrantz and Hoffman's account of Plato's freely deciding to write a dialogue.

First, the analysis assumes a controversial libertarian account of freedom. If compatibilists have the correct view of freedom, then the Rosenkrantz and Hoffman analysis of omnipotence collapses immediately.

Second, if the standards for analysis are as liberal as those indicated in the example, then there are other cases that provide food for thought. Consider, for example, the bringing into existence of an *original* novel, or musical composition, or the like. This seems like something that an omnipotent being ought to be able to do, and yet any analysis here will plausibly involve a state of affairs that is entirely about the past: either the bringing into existence of an original novel requires the bringing into existence of a token of a type of which no tokens had existed previously, or it requires the bringing into existence of a token by a process which is suitably independent of the prior existence of other tokens of this type. So if Rosenkrantz and Hoffman have a good argument for not requiring an omnipotent being to be able to bring about Plato's freely deciding to write a novel, then they also have a good argument for not requiring an omnipotent being to be able to compose a novel, or a piece of music, or the like. But that is not a good result: surely an omnipotent being ought to be able to bring original novels and pieces of music into existence!

Perhaps it might be said that the claim that Rosenkrantz and Hoffman endorse offers them an avenue of reply: an omnipotent being could bring an original novel into existence *by* bringing a novel token into existence in circumstances in which there has not previously existed a token of the type to which that novel belongs. But if this is a good reply here, then surely we can say the same thing about Plato's freely deciding to write a dialogue: an omnipotent being could bring this about *by* bringing it about that Plato decides to write a dialogue in circumstances in which there are no prior or concurrent sufficient causal conditions for Plato's writing a dialogue. If

Plato is rational, then one way of getting him to decide to write a dialogue is by giving him overwhelmingly good reasons to do so (perhaps by making him an offer that no reasonable person refuses!). It seems that there are grounds for fearing that there is some tension between the provision concerning parts in the definition of suitability, and the claim about the bringing about of non-suitable states of affairs by means of the bringing about of suitable states of affairs. Or, at the very least, there are grounds for thinking that the account of Rosenkrantz and Hoffman needs to be supplemented with a precise account of both the notion of an *analysis* of a state of affairs, and the notion of one state of affairs being brought about *by* the bringing about of another state of affairs. Without this supplementation, even absent any other problems with their analysis of omnipotence, it is not possible to judge that their analysis is successful.

Third, given that we have adopted a libertarian conception of freedom, it is unclear why we should think that the problem with bringing it about, that there are no antecedent sufficient causal conditions of Plato's deciding to write a dialogue, is that this requires us to bring about the past. Suppose that I want to bring it about that, tomorrow, Plato freely decides to write a dialogue. Surely, given my omnipotence, I can bring it about that the decisions that Plato makes tomorrow are free decisions, i.e. surely I can make it the case that there are no antecedent or concurrent sufficient causal conditions for the decisions that Plato makes tomorrow. Moreover, as already indicated, it seems that, consistent with this provision, I could also bring it about that, tomorrow, Plato freely decides to write a dialogue. However, what I cannot do is to establish some antecedent or concurrent sufficient condition for Plato's deciding to write a dialogue tomorrow while also ensuring that there are no antecedent or concurrent sufficient conditions for Plato's deciding to write a dialogue tomorrow. If bringing about a state of affairs requires the establishment of an antecedent or concurrent sufficient condition for the occurrence of that state of affairs, then, on the libertarian conception of freedom, no one – other than Plato! – can bring it about that Plato freely decides to write a dialogue.

The fact identified towards the end of the last paragraph – namely that Rosenkrantz and Hoffman appear to have misidentified the difficulty that appears to arise in the case of the bringing about of free decisions – suggests a fourth criticism of their argument in connection with free decision. We might agree with their analysis of free action, and hence suppose that Plato freely decides to write a dialogue just in case conditions (1), (2) and (3) are satisfied. But it does not follow from this agreement that, just because each of conditions (1), (2) and (3) is separately such that it can

be brought about by someone, it is possible for someone to jointly bring about (1), (2) and (3). Now, perhaps it might be objected that this observation points to no difficulty for the analysis, since it is part of the definition of omnipotence that an omnipotent being is only required to be able to bring about suitable states of affairs that it is possible for someone to bring about. But, alas, it seems that there *is* someone – namely, Plato – who can bring it about that Plato freely decides to write a dialogue tomorrow. So, even with the amendments that I have proposed to the accounts of suitability, unrestricted repeatability and the key claim, it seems that the Rosenkrantz and Hoffman account of omnipotence is unsatisfactory.

Fifth, it seems worth noting that it is not at all clear that the Rosenkrantz and Hoffman analysis really does rule that (2) is not an unrestrictedly repeatable condition that can be brought about by someone, because it is actually not at all clear – despite their explicit claim to the contrary – that (2) is entirely about the past. They claim that their analysis can handle the apparent counter-example that an omnipotent agent cannot bring it about that *a raindrop fell at t (where t is a past time)* because a raindrop falling at t is not an unrestrictedly repeatable event. And they claim that their analysis can handle the apparent counter-example that an omnipotent agent cannot bring it about that *a raindrop fell* because it is logically impossible for any agent to bring about the past. However, an agent can bring it about that it is true in ten minutes time that a raindrop fell by bringing it about that a raindrop falls in five minutes time. Similarly, it seems that an agent can bring it about that it is true in ten minutes time that there are no antecedent or concurrent sufficient causal conditions for the decisions that an agent makes at that time – so there is good reason to think that there is nothing in the analysis provided by Rosenkrantz and Hoffman that rules out the bringing about of condition (2). At t, I cannot bring it about that a raindrop fell prior to t, but that does not mean that I cannot bring it about that it is true at some later time t' that *a raindrop fell* (at some time between t and t'). While their analysis does rule out 'bringing about the past' in the sense of 'bringing about a state of affairs prior to the time at which one is acting', it does not rule out 'bringing about the past' in the sense of 'bringing about conditions prior to some other (more distantly future) state of affairs that one brings about'.

8.1.2.6 Overall assessment

Collecting together the various criticisms that have been made thus far, it seems to me that we can conclude that *unrestricted repeatability* is not well suited to playing a central role in the analysis of omnipotence.

First, that a certain state of affairs is unrestrictedly repeatable at some moments in the history of the universe does not guarantee that that state of affairs is unrestrictedly repeatable at other moments in the history of the universe. (This is the lesson of the example about Russell and Wittgenstein, and the example about the Colossus of Rhodes.) Second, that a certain state of affairs is unrestrictedly repeatable at some moments in the history of the universe does not guarantee that there is more than one agent for whom it is logically possible to bring about that state of affairs. (This is the lesson of examples concerning the free choices of free agents. While *I* can bring it about that I freely choose strawberry over chocolate again and again and again – simply by so choosing – libertarian analyses of freedom rule that it is logically impossible for anyone else to have this ability.) Third, there are states of affairs that an omnipotent being ought to be able to bring about that seem likely to resist any analysis in terms of unrestricted repeatability: for example, bringing time to an end, bringing the universe to an end, bringing the existence of the omnipotent being to an end, bringing the omnipotence of the omnipotent being to an end, etc. Even if the technical bugs in the analysis offered by Rosenkrantz and Hoffman can be eliminated, there is thus very good reason to suppose that the result will not be a satisfactory account of omnipotence.

8.1.3 Flint and Freddoso

Thomas Flint and Alfred Freddoso – Flint and Freddoso (1983) – offer the following analysis of omnipotence:

Def^{n}: S is *omnipotent* at t in W *iff* for any state of affairs p and world type for S, Ls, such that p is not a member of Ls, if there is a world W* such that: (1) Ls is true in both W and W*; and (2) W* shares the same history with W at t; and (3) at t in W* someone actualises p; then S has the power at t in W to actualise p.

Def^{n}: A *counterfactual of freedom* is a proposition of the form: if individual essence P were instantiated in circumstances C at time t and its instantiation were left free with respect to action A, then the instantiation of P would freely do A.

Def^{n}: A *world-type* is a consistent set of propositions such that exactly one of each counterfactual of freedom and its negation are the members of the set.

Def^{n}: A *true world-type* is a world-type all of whose members are true.

Def^{n}: A *world-type for S* is a subset of a true world-type consisting of counterfactuals of freedom or their negations about agents other than S.

Def^{n}: An *immediate* state of affairs is a state of affairs whose obtaining at time t does not depend on what states of affairs obtained or will obtain at times other than t.

Def^{n}: The *sub-moment* of t is the set of all immediate states of affairs that obtain at t.

Def^{n}: Worlds W and W* *share the same history at t* iff they share the same sub-moments in exactly the same order for every time prior to t.

Once again, there are various kinds of criticisms that can be made of this analysis of omnipotence, including some that I shall not try to address here.

8.1.3.1 Controversial assumptions

As other commentators have noted, the Flint and Freddoso analysis is controversial not merely because it assumes a libertarian analysis of freedom but, in particular, because it assumes that there are true counterfactuals of freedom concerning both actual and merely possible agents. Furthermore, the Flint and Freddoso analysis assumes that time should be given a tensed (three-dimensionalist) analysis, and that time travel into the past is impossible. Given the controversial nature of all of these claims, it is far from clear that it is desirable for an analysis of omnipotence to be committed to them. Moreover, it is not at all clear that the Flint and Freddoso analysis can be recast to fit the metaphysical predilections of those who disagree with them on some or all of these controversial matters. (This point has added significance because Flint and Freddoso claim that it is a virtue of their approach that it provides a 'secular' analysis of omnipotence, i.e. an analysis that is subject only to those 'non-theological' constraints that emerge from careful reflection about powers and the relationships that hold between powers and properties. At the very least, it is worth asking whether the particular package of controversial metaphysical views upon which Flint and Freddoso rely is really properly thought of as 'non-theological' or 'secular'. I doubt, for instance, that there are very many non-theists who are attracted to this particular collection of views.)

8.1.3.2 Conjunctive states of affairs

Some commentators have proposed a controversial alleged counter-example to the analysis of Flint and Freddoso that deserves attention. Suppose that we agree that an agent can actualise conjunctive states of affairs of the

form 'A&B' and 'A while B' by actualising the state of affairs A in circumstances in which the state of affairs B obtains. Then, for example, consider a situation in which S is the only agent who has any role in actualising the state of affairs that A. Given our assumption, S can actualise the conjunctive state of affairs: *A and no agent other than S plays any role in actualising A*, and S can also actualise the conjunctive state of affairs: *A and no omnipotent agent plays any role in actualising A*. But surely no omnipotent agent can actualise either of these states of affairs, contrary to the demands of the Flint and Freddoso analysis. (See Gellmann (1989) and Hoffman and Rosenkrantz (2002b) for other examples of this kind of objection to the analysis of Flint and Freddoso.)

It is not obvious that this kind of counter-example is fatal, at least when taken in isolation. In particular, it seems that it is open to Flint and Freddoso to insist that, in order to actualise a conjunctive state of affairs, an agent must actualise each of the conjuncts of that state of affairs. If one actualises the state of affairs that A in circumstances in which B obtains, then the conjunctive state of affairs A&B certainly comes to obtain – but it is not true that one actualised the conjunctive state of affairs, since the obtaining of B was not in any sense something that was under your control. Of course, this suggestion adds to the theoretical debt of the Flint and Freddoso account – since we now require a substantive explanation of the notion of a conjunctive state of affairs, in order to accommodate cases like Gellmann's 'Someone doing R to himself autonomously' – but, at the very least, the possibility that such an account might be constructed ought not to be ruled out prior to the conduct of a fair investigation of the proposal.

8.1.3.3 Puncture

Flint and Freddoso assume that, if Jones is in circumstances C at t, then Jones can bring it about that *if Jones were in C at t, he would freely decide at t to let out the dog*, by freely deciding to let out the dog. Now, consider the conjunctive state of affairs: *the cat comes in and if Jones were in C at t, he would freely decide at t to let out the dog*. We can easily imagine circumstances in which Jones can bring about this conjunctive state of affairs at t: perhaps, for example, he can do this by freely choosing to open the door to allow the dog out. Suppose, now, that S is omnipotent. Since the state of affairs *the cat comes in and if Jones were in C at t, he would freely decide at t to let out the dog* does not belong to Ls, it follows from the Flint and Freddoso account of omnipotence that an omnipotent being can bring about this conjunctive state of affairs even though it cannot bring about one of the conjuncts. Not good. (Remember, we have already seen that, in order to meet other putative counter-examples, it appears that Flint and

Freddoso need to suppose that, in order to bring about a conjunctive state of affairs, an agent must bring about each of the conjuncts of that state of affairs. So Flint and Freddoso cannot just insist that this is a harmless consequence of their account.)

Perhaps you might think that the problem is easy to fix. While many conjunctions of states of affairs, some of whose conjuncts belong to Ls and some of whose conjuncts do not belong to Ls, constitute counter-examples to the analysis of Flint and Freddoso, we can handle this difficulty simply by insisting that any state of affairs that entails a state of affairs that belongs to Ls also belongs to Ls. For, given this patch, the state of affairs *the cat comes in and if Jones were in C at t, he would freely decide at t to let out the dog* belongs to Ls, and hence is not something that S is required to be able to bring about if S is omnipotent. But our difficulties are not over. For consider, instead, the disjunctive state of affairs: *if Jones were in C at t, he would freely decide at t to let out the dog or if Jones were in C at t, he would freely decide at t to go to the bathroom*. Given that Jones is in circumstances C at t, then, according to Flint and Freddoso, Jones can bring about this disjunctive state of affairs either by freely deciding to let out the dog or by freely deciding to go to the bathroom. But the disjunctive state of affairs does not belong to Ls, and so it follows from the Flint and Freddoso analysis that an omnipotent being can bring about this disjunctive state of affairs even though an omnipotent being can bring about neither of the disjuncts. Not good.

Perhaps you might think that this problem is also easy to fix. While disjunctions, all of whose disjuncts belong to Ls, constitute counter-examples to the amended form of the analysis offered by Flint and Freddoso, we can handle this difficulty simply by insisting that any state of affairs entailed by a state of affairs that belongs to Ls itself belongs to Ls. Given this patch, the state of affairs *if Jones were in C at t, he would freely decide at t to let out the dog or if Jones were in C at t, he would freely decide at t to go to the bathroom* belongs to Ls, and hence is not something that S is required to be able to bring about if S is omnipotent. But if we say this, then our difficulties have grown much worse! For consider. Suppose that S belongs to Ls and that N is an arbitrarily chosen proposition. Since S&N entails S, S&N belongs to Ls (by our first patch). Since S&N belongs to LS, N belongs to Ls (by our second patch). So N belongs to Ls, i.e. there are no propositions that do not belong to Ls. Disaster!

Perhaps there is some way of fixing this difficulty, for example by adopting a non-classical logic. However, it seems to me that the onus here is clearly on the defenders of the analysis to provide an amendment of their account that meets these difficulties. Failing the provision of

such an amendment, we have good reason to say that the analysis is a failure.

8.1.3.4 Collective action

Suppose that S is omnipotent at t in W. Suppose further that, leaving S aside, there is no agent in W who, acting alone, can bring it about that p in any world W* that shares its history with W, but that there is a group of agents in W who, acting together, can bring it about that p in some world W* that shares its history with W. (Consider, for example, the state of affairs of bringing it about that *a particular car is raised one metre above the ground using nothing but human muscle power*. Suppose that no human acting alone can bring about this state of affairs, but that there are groups of four people who are able to bring it about that the car is raised one metre above the ground using nothing but human muscle power.) As things stand, the Flint and Freddoso definition would allow that a being is omnipotent even if it cannot bring it about that this particular car is raised one metre above the ground using nothing but human muscle power. And that seems wrong.

Perhaps a fix is not far to seek. Rather than saying that, given the other conditions, an omnipotent being is able to bring about any state of affairs that *any agent brings* about in some world that shares the history of the omnipotent being, say instead that an omnipotent agent is able to bring about any state of affairs that *any agents bring* about in some world that shares the history of the world of the omnipotent being. With this amendment, in the world of our example, an omnipotent being would be required by the analysis to have the power to bring it about that the car in question is raised one metre above the ground using nothing but human muscle power. However, this patch creates at least the potential for a different kind of objection: if there are states of affairs that can only be brought about by the united actions of more than one agent, then the modified analysis will now require that an omnipotent agent is able to do things that it is impossible for any solo agent to do. (Consider, for example, the state of affairs that *if everyone in the room were free with respect to giving to Oxfam at t, then everyone in the room would freely chooses to give to Oxfam at t*. If there is more than one person in the room, and if everyone in the room is free with respect to giving to Oxfam at t, then this state of affairs can only be brought about by the joint free choices of the agents in the room. So, if this state of affairs does not belong to Ls – which, of course, it does not under the formulation that Flint and Freddoso give to their definition – then it is also a counter-example to the patched proposal.)

8.1.3.5 Strong actualisation

Flint and Freddoso follow the standard practice of Molinists in distinguishing between two different kinds of actualisations of states of affairs: an agent S *strongly actualises* a state of affairs p just in case S causally determines p's obtaining; and agent S *weakly actualises* a state of affairs p just in case S strongly actualises T's being in situation C where it is true that if T were in C, then T would either weakly or strongly actualise p, for some agent T other than S. However, in their definition, holding the other conditions fixed, they claim merely that an omnipotent being has the power to actualise any state of affairs that some other being can actualise. While Flint and Freddoso are content with this claim – in effect, the claim that an omnipotent being has either the power to strongly actualise, or the power to weakly actualise, any state of affairs for which it is true that some being has either the power to strongly actualise or the power to weakly actualise that state of affairs – it is not at all clear that they are right to be thus content.

Suppose that a heavy object needs to be lifted onto a shelf. Suppose that you can bring it about that the object sits on the shelf either by lifting it up there, or by asking someone else to put it there (in circumstances in which, were you to ask, the person in question would lift the object onto the shelf). Suppose further that I can only bring it about that the object sits on the shelf by asking someone else to put it there (in circumstances in which, were I to ask, the person in question would lift the object onto the shelf). I think that there is a very strong intuition that, in these circumstances, no further information is required in order to reach the conclusion that *I* am not omnipotent. Given that you can strongly actualise *this* state of affairs whereas I can *only* weakly actualise this state of affairs, it follows that I am less powerful than you. Moreover – I think – the intuition persists even if we add the assumption that I am never without my helper, so that I am never in a situation in which you can strongly actualise a state of affairs that I am unable even to weakly actualise.

This example can be adapted to pose trouble for the Flint and Freddoso analysis. Suppose that there are lots of states of affairs that have nothing to do with freedom of the will that S can only weakly actualise, but which other agents can strongly actualise. Then, whatever else may be true, it seems to me that it cannot be the case that S is omnipotent. Omnipotence cannot be so fragile as this analysis requires; it cannot be that S changes from being omnipotent to failing to be omnipotent simply because some other agents – those who would bring about the target state of affairs if placed in the appropriate circumstances – are removed from the world.

Setting aside cases directly concerned with freedom – for example, states of affairs such as Jones' freely letting the dog out – an omnipotent being should be able to strongly actualise any state of affairs that other agents are able to strongly actualise.

8.1.3.6 Changing the present

Here is a tempting objection to the analysis of Flint and Freddoso: Consider a world W in which there is only one agent, S, at time t. Any world W* that shares the history of W to t will also contain just the one agent, S, at time t. So, no matter what powers are possessed by S, it follows that S is omnipotent: anything that S does in W*, S has the power to do in W. But if, for instance, S is unable to lift heavy objects, then it is plain that S is not omnipotent. (Note that Ls is empty if S is the only agent.) Or, consider instead a world W in which there are n agents at time t, one of whom – S – is able to do anything that any of the other agents is able to do. Any world W* that shares the history of W to t will also contain just these n agents with just those powers that they have in W. So, no matter what powers are possessed by S, it follows that S is omnipotent: anything that any agent does in W*, S has the power to do in W. But again, if, for instance, S is unable to lift heavy objects, then it is plain that S is not omnipotent.

I take it that this tempting objection is based on a misunderstanding. If W and W* share histories to t, it does not follow that their sub-moments are shared at t; rather, all that follows is that their sub-moments are shared at all times prior to t. Thus, even though there is only one agent with limited powers in W at t, there may be many agents with all manner of powers in W* at t, even though W and W* share their history to t. However, while this response may suffice to overthrow the tempting objection, it raises further questions in its train. In particular, one might wonder whether there *are* possible worlds of the kind that this analysis requires. Certainly, there are many philosophers who would deny that there are possible worlds in which scores of powerful agents pop into existence simultaneously and yet uncaused. If you are worried by the suggestion that any old string of sub-moments constitutes (the supervenience base for) a *possible* world, then you have reason to worry about the commitments required by the Flint and Freddoso analysis.

Perhaps there is a deeper philosophical point to be made here. Flint and Freddoso want their analysis to have the consequence that an omnipotent agent is not required to change the past. But it seems to me that the reasons that Flint and Freddoso have for making this insistence carry over

to reasons for holding that an omnipotent being is not required to change the present either. If we ask what states of affairs an agent has the power to bring about at t – where what we mean is that we are considering the agent at t, and asking what he then has the power to bring about – then we are asking about those states of affairs that the agent has the power to make obtain at times strictly later than t. (There is an alternative way of understanding the question about the states of affairs that an agent has the power to bring about at t, where what we mean is that we are considering possible states of affairs that might obtain at t, and we are asking which of these states of affairs were within the power of the agent to bring about at times strictly earlier than t. But this is clearly not the sense intended by Flint and Freddoso.) At time t, no one has – nor can have – the power to bring about states of affairs that obtain at t; it is already too late for that! However, if this is right, then it seems that some quite fundamental adjustment to the analysis of Flint and Freddoso will be required.

8.1.3.7 Overall assessment

Collecting together the threads of the above discussion, it seems to me that we can conclude that the Flint and Freddoso analysis is in a state of serious disrepair. First, considerations about the bringing about of conjunctive states of affairs seem to lead to the conclusion that either the analysis is subject to decisive counter-examples or else it collapses completely because all states of affairs belong to Ls. Second, questions about what it is possible for an agent at time t to bring about at time t lend considerable support to the suggestion that an analysis couched in terms of what agents do in *possible* worlds that share the history of a world to time t are subject to intractable difficulties. (I think that there is good reason here to think that the notion of shared world histories is not well suited to play a key role in the analysis of omnipotence, even if one accepts the claim that it is impossible to bring about past sub-moments.) Third, there are various kinds of problematic – or, at any rate, controversial – metaphysical commitments that are built into the Flint and Freddoso analysis with which – at least in my view – an adequate analysis ought to have no truck. And, fourth, there are other difficulties with the analysis of a more or less technical nature (including, for example, the difficulties raised by the distinction between strong and weak actualisation of states of affairs). Given all of these difficulties, it seems to me that there is a very strong reason to say that, even if the various technical bugs could be repaired, it seems most unlikely that this kind of approach will lead to a satisfactory analysis of omnipotence.

8.1.4 Wierenga

There is one other recent analysis of omnipotence that is regularly given serious consideration when the question of the correct analysis of omnipotence is raised. Edward Wierenga (1983; 1989) claims that *a being x is* omnipotent *in a possible world w at time t iff it is true in w both that (1) for every state of affairs that p, if it is logically possible for the history of the world to be as it is until t and for x to strongly actualise the state of affairs that p at t, then x has it within its power to strongly actualise the state of affairs that p at t; and (2) there is at least one state of affairs that x has within its power to strongly actualise at t*.

Various objections to this analysis have been noted in the literature. Many of these objections turn on the observation that a being is not omnipotent if there are *essential* limitations on what it can do that are not shared by other beings. Suppose that there is a being, O, which, as a matter of logic, is only able to strongly actualise a very limited range of states of affairs, but which actually has within its power the ability to strongly actualise all of those states of affairs that it is logically possible for this being to strongly actualise. Suppose, in particular, that there are other beings that have within their power to do all the things that O is able to do, and more besides, because these other beings do not have the essential limitations that O has. It seems quite clear that we should not suppose that O is omnipotent, even granted the further assumption that there are some states of affairs that O has within its power to strongly actualise, if there is (or could be) something that is able to strongly actualise all that O can strongly actualise, and more besides. *A being that is – or can be –* dominated *by another being with respect to powers and abilities is plainly not a being that is omnipotent.*

It might be thought that omnipotence is not merely incompatible with domination by another being but, in fact, requires domination of all other possible beings: if O is omnipotent, then there is nothing that it cannot bring about that some other being can bring about. This thought has often been explicitly rejected by those interested in the analysis of omnipotence. So, for example, Hoffman and Rosenkrantz (2002b: 2) claim that:

> [I]t [does not] follow that a being with maximal power can bring about whatever any other agent can bring about. If a can bring about s, and b cannot, it does not follow that b is not overall more powerful than a, since it could be that b can bring about more states of affairs than a can, rather than the other way around. This comparative sense of 'omnipotence' as maximal power appears to be the only sense that has a chance of being intelligible.

There are various different kinds of problems with this observation.

First, the analysis that Rosenkrantz and Hoffman go on to offer is not couched in terms of 'the comparative sense of "omnipotence" as maximal power': on their analysis, an omnipotent being has it within its power to bring about any *suitable* state of affairs that it is possible for some agent to bring about. So, in fact, Rosenkrantz and Hoffman implicitly commit themselves to a *restricted* version of the dominance principle that they explicitly disavow. Of course, nothing that has been said here rules out the possibility that there are states of affairs that are not unrestrictedly repeatable and that can be brought about by some agent's bringing about of an unrestrictedly repeatable state of affairs, and yet which cannot be brought about by some other being's bringing about of that or any other unrestrictedly repeatable state of affairs, even though that other being can bring about any suitable state of affairs that it is possible for some agent to bring about. But, equally, there is nothing in the Rosenkrantz and Hoffman analysis to guarantee that a being that satisfies their definition of 'omnipotence' can bring about more states of affairs than any other possible being.

Second, even if we do want to allow that dominance fails – i.e. that an omnipotent being *need not* be able to do everything that can possibly be done by other beings – we surely should not then try to distinguish omnipotent from non-omnipotent beings in terms of the *number* of states of affairs that it is possible for these beings to bring about. Consider two beings, each of which can bring about an infinite number of states of affairs, and suppose further that there is no being that can bring about a number of states of affairs with a higher infinite cardinality. Should we insist, without making any further enquiries, that neither can be omnipotent, since neither can bring about *more* states of affairs than the other? But what if one dominates not only the other, but all other possible beings? If – perhaps *per impossibile* – there were a possible being that could bring about any state of affairs that it is possible for any other possible being to bring about, then that being would plainly be omnipotent. (Moreover, this is so even if the cardinality of the collection of states of affairs that it can bring about is no greater than the cardinality of the collection of states of affairs that can be brought about by other actual or possible beings.)

Third, it is surely just a mistake to suppose that analyses of 'omnipotence' couched in terms other than those of 'maximal power' are 'unintelligible'. On the contrary, it seems that there is a straightforward argument to the conclusion that 'dominance' analyses of 'omnipotence' are straightforwardly 'intelligible'. After all, it is clear that we *can* develop S5 models

in which it is true that there are agents who, in given worlds at given times, can bring about any state of affairs that it is possible for some agent to bring about in those circumstances. (Consider, for example, models in which there are many agents in many worlds who have exactly the same powers, and then one agent in one world who has all of the powers of all of the other agents in all of the other worlds, and more besides.) But surely the existence of these models is all that we need to table in order to establish the 'intelligibility' of the 'dominance' analysis of 'omnipotence'. Of course, this kind of consideration can hardly establish the *correctness* of the 'dominance' analysis of 'omnipotence', though it is hard to see why it should not be taken to make a significant contribution to the case. (There is a *secular* concept here for which a label is required. 'Omnipotence' looks like a good candidate.)

Quite apart from what one thinks of the above critique of the Hoffman and Rosenkrantz discussion of 'maximal power', it seems to me that we are in a position to set down a condition, the satisfaction of which will tell us that agent A is *not* omnipotent in world w at time t: *There is an agent A' in world w' at time t' such that: (1) there are no differences between how w is at t and how w' is at t' apart from differences in how A is in w at t and how A' is in w' at t'; and (2) A' in w' at t' has capacities and powers that A in w at t lacks but A in w at t does not have capacities and powers that A' in w' at t' lacks.* This condition is able to do useful work for us. Consider how I am now. There is a world, otherwise identical to ours at t, in which I am replaced by a being that has all of the powers and capacities that I have at t, except that that being can run a little faster than I can. So I am not omnipotent. (Of course, the history of that other world may well be very different from the history of our world, particularly at earlier times in history. What matters is the near-duplication at time t.)

There is more to be said about whether this necessary condition for omnipotence can be developed into an analysis of omnipotence, but proper exploration of this idea will have to be deferred to another occasion. Perhaps it is worth noting here that it is pretty clear that it will not do to suggest that *an agent A is omnipotent in world w at time t* iff *there is no agent A', world w' and time t' such that: (1) there are no differences between how w is at t and how w' is at t' apart from differences between how A is in w at t and how A' is in w' at t'; and (2) A' in w' at t' has capacities and powers that A in w at t lacks but A in w at t does not have capacities and powers that A' in w' at t' lacks.* This says, roughly, that a being is omnipotent iff it is not dominated by any other similarly located being; and that is plainly too weak. Perhaps we might suggest that *an agent A is omnipotent in world*

w at time t iff *there is no agent A', world w' and time t' such that: (1) there are no differences between how w is at t and how w' is at t' apart from differences between how A is in w at t and how A' is in w' at t'; and (2) A' in w' at t' has capacities and powers that A in w at t lacks.* This says, roughly, that a being is omnipotent iff it dominates every other similarly located possible being. Maybe that is right, though there are issues about the ways in which 'location' can constrain powers that need to be explored in order to arrive at a satisfactory assessment of the proposal. (A being should not get to be counted as 'omnipotent' simply because its 'location' rules out the possession of abilities and powers that beings in other 'locations' can have. However, if we suppose that it is possible for there to be action at a distance and creation *ex nihilo*, then it is not clear that there are any necessary constraints associated with 'location'.)

8.1.5 A proposal

According to orthodox monotheisms, our universe was created by a very powerful being. On one version of this view, the powerful being creates time but is not itself in time. On a second version of this view, the powerful being creates time and, *in consequence*, is itself in time. On a third version of this view, the powerful being does not create time but is nonetheless itself in time. We can finesse worries about the difference which these variations might make to the description of the powers of the being in question by focusing on the powers that the being possesses at different stages in the causal order of the world of which our universe is a part. (Of course, this suggestion immediately prompts questions about the relationship between temporal order and causal order; however, we do not need to consider these questions here.)

Consider the powers of the being at a stage in the causal order that is prior to the creation of our universe. According to orthodox monotheisms, the powerful being chooses to make a universe – and if it had not made this choice, then our universe would not have come into existence. Moreover, according to orthodox monotheisms, the choice that the powerful being makes is free, and the freedom in question is libertarian: in the very circumstances in which the choice is made, the powerful being could have made a different choice.

What different choices could the powerful being have made? Well, according to orthodox monotheisms, every feature of the universe is either such that the very powerful being chose to make the universe that way, or else such that the very powerful being chose to allow that feature of the

universe to be determined as the outcome of an objectively chancy process (for example, the free choices of free agents, where the freedom in question is libertarian). For choices about those parts of the causal order in the universe which are not downstream from any objectively chancy processes, then the only limitations which the powerful being has are those which are logically required by the nature of the powerful being: it can make any logically possible initial segment of a universe whose creation is not logically inconsistent with the essential properties of the powerful being. However, for choices about those parts of the causal order in the universe that are downstream from objectively chancy processes, the powerful being is limited by its own essential properties and by the outcomes of the causally prior objectively chancy processes.

According to orthodox monotheisms, the powerful being is both all-knowing and perfectly good. If – as many suppose – the powerful being is essentially perfectly good, then it seems plausible to hold that this imposes a severe constraint on the power of the powerful being: it cannot do anything that is logically ruled out by perfect goodness. This constraint might be very severe indeed: it might be, for instance, that there is a unique best initial segment of a universe, and that the perfect goodness of the powerful being requires that it bring about this initial segment of a universe if it brings about any initial segment of a universe. (If the perfect goodness of the powerful being also required that it bring about this initial segment rather than refrain from entering into the business of universe building, then it seems that we should have to take back the claim that the powerful being freely chose to make the universe, at least on the assumption that freedom is given a libertarian analysis.) Even if there is not a unique best initial segment of a universe, it might still be that the powerful being can only bring about a very limited range of initial universe segments compared with other possible beings. (Suppose, for example, that the powerful being can make lesser free beings that have the capacity to make universes. It might well be that one of these lesser beings could make a much greater range of initial universe segments than the powerful being can make.)

A range of views is possible about the knowledge of the powerful being. The most attractive view – it seems to me – is to suppose that the knowledge of the powerful being is limited both by logic and by position in the causal order: given that the powerful being is causally upstream from an objectively chancy part of the causal order, then the powerful being does not and cannot have full knowledge of that part of the causal order. Moreover, the powerful being cannot have knowledge that is forbidden by the essential nature of the powerful being: perhaps, for example, there is

knowledge that a perfectly good being cannot have, but that a being that is not perfectly good can have. Even if there are these limitations on the knowledge of the powerful being, it is not at all clear that these limitations lead to any further restrictions on the power of that being. First, there might not be anything that is ruled out by these limitations. Second, even if there are things ruled out by these limitations, those things might have no impact on the powers of the powerful being. Rather than pursue these considerations further, I shall simply set considerations about the extent of the knowledge of the powerful being to one side, and take them up again in the subsequent discussion of omniscience.

To summarise the discussion to this point, then: we can divide the discussion of the powers of the powerful being who is supposed to have created the universe into two parts. First, when it comes to the 'initial segment' of the universe – i.e. that 'part' of the universe that is causally prior to any objectively chancy processes – the powerful being is limited only by its own essential properties and the laws of logic: it can make any initial segment of a universe other that those whose creation is logically ruled out by the essential properties of the being in question or by the laws of logic alone. If we suppose that the 'initial segment' of the universe has a sequential causal structure, then we might think that there is a further constraint: at any point in the causal structure, the powerful being is limited by the earlier parts of the causal structure. However, on the plausible assumption that the powerful being has total control of the universe until the occurrence of the first objectively chancy process, there is no reason to think that the powerful being could want to revise its plan somewhere between the beginning of the universe and the point at which the first objectively chancy process occurs. (Remember: we are taking it for granted that the powerful being is vastly knowledgeable.) Given that the powerful being is essentially vastly knowledgeable, there is no possible world in which it 'deviates' from its initial plan prior to the occurrence of the first objectively chancy process.

Second, when we consider a point that is downstream in the causal order from one or more objectively chancy processes, there are more limitations on what the powerful being can do. It is still limited by its own essential nature. It is still limited by logic. It is also limited by the fact that it is at a certain point in the causal order: it cannot 'undo' the prior causal order. And it is limited in another way by the causal order to the point at which it is now 'located': given the constraints imposed by the essential nature of our powerful being, there may be many things that a different powerful being could do that our powerful being is unable to do *given* the

causal history of the universe to that point. To take a contentious example: it might be that there are some causal histories that could develop under the governance of our powerful being that it is unable to terminate by allowing the universe to lapse into non-existence, even though a different powerful being (with a different essential nature) could allow a universe with a suitably similar causal history to lapse into non-existence.

On the view just sketched, there are three main features of the powers of the powerful being under discussion. First, it is directly responsible for the existence of the universe, and for many of the features that the universe possesses: it was at one time free to choose not to create the universe; and, at least at earlier times, it was free to make it the case that the universe possess features quite different from those that it actually possesses. Second, it is 'indirectly' responsible for all of the other features that the universe possesses, in the sense that those features are possessed by the universe only because the powerful being permitted those features to arise as the result of objectively chancy processes. (This is not to say that the powerful being chose these features, or that it approves of them; rather, the point is just that it played a crucial causal role in the present possession of these features by the universe.) Third, despite the second of the points just noted, there remains a sense in which the powerful being retains 'ultimate authority' over the universe: there can be nothing that happens in the universe that is logically inconsistent with the permission of the occurrence of that thing by the powerful being. Within the limits of the constraints imposed by its own nature and the prior causal history of the universe, the powerful being has 'power of veto' over everything that happens. If, for example, it is consistent with the essential nature of the powerful being to allow the existence of the universe to lapse if the objectively chancy processes yield sufficiently bad results, then the powerful being has the power to allow the universe to pass out of existence in those circumstances.

Of course, this sketch leaves many questions unanswered. For example, it might be wondered whether the powerful being has the ability to give up its 'power of veto' over the events that occur in the universe (to the extent that it has this power). It seems to me that it is plausible to suppose that it is not compatible with the essential nature of the powerful being – as that being is standardly conceived in orthodox monotheisms – to allow that the powerful being does have power to give up this kind of 'power of veto'. Even if this matter is controversial, it will probably do no harm to add this supposition as a simplifying assumption for the purposes of the present discussion.

However, one thing that does plausibly emerge from the above discussion is that there are many limitations on the power of the powerful being under discussion. There are many things that it cannot do that it is at least possible for other creatures to do. There are many states of affairs that it cannot directly bring about that it is at least possible for other creatures to directly bring about. There are many indefinitely repeatable states of affairs that it cannot directly bring about that it is at least possible for other creatures to directly bring about. And so forth. Since standard philosophical accounts of omnipotence typically deny one or more of these consequences of the above account, it seems to me that the above account presents a powerful challenge for extant accounts of omnipotence, even waiving the other difficulties that are faced by those accounts. Either the above account of the powers of the powerful being is an account of what it is to be omnipotent, or else – contrary to the received view – it is not correct to claim that the powerful being is omnipotent.

In fact, we can go further here. Suppose, first, that the being discussed in the first section is not a necessary existent (so that there are possible worlds in which this being does not exist). That is, suppose that there is a contingently existing creator of our universe, and that that creator is very powerful, very wise and essentially perfectly good. Given that this being is merely contingently existing, there seems to be no reason not to suppose that it is possible that there is a being just like it in a world that is otherwise identical to ours at all times except for the fact that the being in question is not *essentially* perfectly good (but is rather essentially morally indifferent). Furthermore, it is very plausible to suppose that this other being will dominate the being described in the first section of this chapter: that other being will be able to do all that the described being can do, and more besides. So, given only the point that being dominated is sufficient to rule out being omnipotent, we can conclude that the being described in the first section of this chapter is not omnipotent.

Suppose, second, that we make the same assumptions as we did in the previously discussed case, except that we give up on the requirement that the being described in the initial part of this chapter is *essentially* perfectly good, and hold instead that our being is merely contingently perfectly good. The difference between these hypotheses can be described as follows: to be perfectly good is to be such that you always act for the best no matter what circumstances are thrown at you; whereas to be essentially perfectly good is to be such that it is *impossible* for you to act for anything less than the best no matter what circumstances are thrown at you. I cannot see any reason why a perfectly good being should not have

within its power the ability to do the most horrendous evil; it is consistent with always acting for the best that one is able to act for much less than the best. Consequently, in this case, we cannot conclude that the being described in the first section of this chapter is not omnipotent merely on the basis of considerations about domination.

Suppose, third, that we suppose that the being described in the opening part of this chapter is a necessary existent, and that it is necessarily very powerful, very wise and perfectly good. Even given all of these assumptions, it may still be possible to describe circumstances in which that being is dominated by another being. Plausibly, prior to any other acts of creation, it was possible for our being to make another very powerful and very wise being, and to give it a free hand in the enterprise of creating universes. Moreover, it is also plausible to think that our being could have made this other being such that, whenever their wills clashed, neither one prevailed (but, rather, events continued as if neither act of willing had occurred). If our being were to proceed in this way, and if the being that it created were less than perfectly good, then there is no reason why it should not turn out to be the case that, from the moment of its creation, the newly created being dominates the necessarily existent being. (Remember: what is required for domination is that the one being can do all that the other being can do, and more besides. Since perfect goodness greatly constrains action, a being of similar power and wisdom that is not perfectly good will plausibly dominate a being that is perfectly good. Note, too, that there is nothing in the imagined scenario that requires that our perfect being give up its 'right of veto' over the universe: it can still 'veto' any actions on the part of the created being that it wishes to 'veto'.)

If what I have argued here is correct, then we have the following conclusions. First, we need only appeal to uncontroversial considerations about dominance in order to rule that the gods of orthodox monotheisms are *not* omnipotent, unless we hold that these beings are merely contingently perfectly good. Second, if we hold that the gods of orthodox monotheisms are merely contingently perfectly good, then we have no guarantee that we can consistently maintain that these beings are omnipotent, but we do have a guarantee that we have adopted a religiously unappealing conception of the creator of the world. (In view of the horrendous evils of this world, why should we suppose that the creator *is* perfectly good if we have already acknowledged that, at best, the creator is merely contingently perfectly good? If there are any virtues that attach to belief in a perfectly good creator, these virtues must arise from the *a priori* support that attaches to this belief.) Third, in light of the previous two conclusions, it seems

plausible to claim that we should draw a careful line between the (secular) idea of *omnipotence*, and the (religious) idea of *divine power*. The reason for this need not be – as Geach (1973a)(1973b)(1977) has it – that the (secular) idea of omnipotence is hopelessly confused, and beyond hope of coherent explication. Rather, it seems that, if the (secular) idea of omnipotence is capable of coherent explanation, then it will turn out to be quite distinct from the (religious) idea of divine power, at least if that idea is captured in anything like the account that has been sketched out here.

Even philosophers who are more or less sympathetic to the line that I have taken here may think that there is another alternative, namely to insist that there is no (secular) idea of omnipotence, and to hold that that notion of divine power outlined at the beginning of this chapter is just an account of omnipotence. Taliaferro (1998: 75) is one philosopher who might be taken to be sympathetic to just such a position. While what he actually says – namely that *a being is omnipotent* iff *there is no other being that both has a greater scope of power and possesses a greater compossible set of excellent properties* – seems manifestly mistaken – since it entails that if there were just one miserably puny being, that being would be omnipotent – it seems clear enough that what motivates his proposal is the thought that to be omnipotent is just to have whatever powers God actually happens to have. While I would be happy enough to give Taliaferro the word 'omnipotence' for this purpose, I think that it should be borne in mind that there is a by now fairly well-established use of the word 'omnipotence' in the philosophical literature that does not conform to this account. It seems that there is a (secular) conception of omnipotence, and it seems that it is possible for something other than a being possessed of divine power to have the thus conceived property (if it is possible for anything at all to have the property). Since Taliaferro is plainly prepared to live with the consequence that he would need to *say* that there can be beings whose scope of powers vastly exceed those of omnipotent beings, there is perhaps no need to quarrel further with the line being here canvassed.

8.1.6 Questions addressed

Here are some questions about the connection between omnipotence and infinity that we might like to answer: (1) Is it true that the correct analysis of a given omni-attribute yields the conclusion that a being that possesses that attribute stands in a certain kind of relation to all of the members of a given ontological category? (2) Is it true that the ontological categories that are plausibly required in the analysis of a given omni-attribute have

infinitely many members? (3) Is it true that the correct analysis of a given omni-attribute yields the conclusion that there are actually instantiated relations that hold between the possessor of that omni-attribute and the individual members of the ontological category that is plausibly taken to be relevant to the analysis of that omni-attribute?

Alas, the discussion to this point provides insufficient assistance in answering the last of these questions. True enough, it seems plausible to suppose that any satisfactory analysis of omnipotence is bound to yield the conclusion that an omnipotent being 'stands in a certain relation' to all of the members of a suitably circumscribed class of possible actions, or possible states of affairs, or the like; and, consequently, it also seems plausible to suppose that any satisfactory analysis of omnipotence will yield the conclusion that an omnipotent being 'stands in a certain relation' to a collection of infinitely many distinct possible actions, or possible states of affairs, or the like. But why should we suppose that the claim that an omnipotent being 'stands in a certain relation' to a collection of infinitely many distinct possible actions, or possible states of affairs, or the like, *entails* the conclusion that there is an actual infinity of distinct properties that are possessed by an omnipotent being, or that there is an actual infinity of distinct relations that are instantiated in any world in which there is an omnipotent being?

Almost all of our discussion has supposed that the right way to think about omnipotence is in terms of powers, or abilities, or the like. On the assumption that there are infinitely many distinct powers, or abilities, or the like, it might be supposed that a satisfactory analysis of omnipotence is bound to lead to the conclusion that an omnipotent being possesses infinitely many distinct powers, or abilities, or the like. However, there are two different reasons why an inference of this kind is not straightforward.

First, it seems plausible to suppose that the ability to do A and the ability to do B, where A and B are different actions, might both be manifestations of the same underlying power or ability. While there is some plausibility to the claim that we know how to count 'abilities to do A' or 'abilities to bring it about that p' – because we have at least some idea about how to count distinct actions and distinct states of affairs – it is not at all clear how we might go about counting 'underlying powers' or 'underlying abilities'. But our question about the implications of analyses of omnipotence for questions about actual infinities is plausibly interpreted as a question about whether or not those analyses imply a commitment to an actual infinity of 'underlying powers' or 'underlying abilities'.

Second, it seems plausible to me to suppose that abilities, powers, dispositions and the like cannot be fundamental realities: abilities, powers,

dispositions and the like all require categorical bases in which they are realised. But if we accept that abilities, powers, dispositions and the like all require categorical bases in which they are realised, then it seems plausible to accept that different 'underlying powers' or 'underlying abilities', or 'underlying dispositions' may be realised by the very same categorical basis. Consequently, even if a satisfactory analysis of omnipotence were to entail that an omnipotent being has an actual infinity of 'underlying powers' or 'underlying abilities', it is not clear that such an analysis will entail that an omnipotent being is actually infinite: for it is not obvious that the categorical basis for an infinite number of 'underlying powers' or 'underlying abilities' need itself be infinite.

While, as I have just noted, there are difficulties in reaching the conclusion that an omnipotent being must be intrinsically infinite – and, consequently, while there are difficulties in reaching the conclusion that the existence of an omnipotent being entails that there are actually instantiated infinities – it nonetheless seems very *plausible* to me to suppose that a categorical basis for an infinite number of 'underlying powers' and 'underlying abilities' will itself be infinite; and it also seems to me to be *plausible* to suppose that – on the kinds of analyses that we have been considering – an omnipotent being will have an infinite number of 'underlying powers' and 'underlying abilities'.

Of course, even if I am right about what it is plausible to suppose about omnipotent beings, the discussion that I have given of the concept of omnipotence suggests that monotheists should be more interested in questions about the entailments of the account of the powers of 'orthodoxly conceived monotheistic gods' than in questions about the entailments of satisfactory accounts of omnipotence. Does the account that I sketched of the powers and abilities of 'a standardly conceived monotheistic god' entail that that being has infinitely many distinct 'underlying powers' and 'underlying abilities' that are realised in an actually infinite categorical basis?

If we suppose – for example – that our powerful being is timeless, and that it is required to act directly at each point in space and time in order to conserve the universe in existence at that point in space and time, then, on the plausible assumption that there are infinitely many distinct spatio-temporal locations, it seems that we shall need to suppose that there are actually instantiated relations between that omnipotent being and each of the distinct spatio-temporal locations. Of course, in this case, we are not really considering the 'underlying powers' and 'underlying abilities' of the being in question; rather, we are concerned with the actions that it actually performs.

If we suppose – to take a different example – that our powerful being is timeless, but that it merely has the ability to act directly at each point in space and time, then it is not so clear that we need to suppose that there is anything actually infinite about our powerful being even if we suppose that there are infinitely many distinct spatio-temporal locations. Of course, it might be that considerations about other attributes – for example omniscience and/or omnipresence – will entail that there is something actually infinite about this kind of powerful being; but it is simply unclear whether we need to suppose that the 'underlying powers' and 'underlying abilities' of our powerful being, and/or the categorical basis in which these 'underlying powers' and 'underlying abilities' are realised, are themselves actually infinite.

While there are many lessons that one might draw from consideration of the above two examples, the one on which I am most tempted to insist is this: while it is not clear whether the 'abilities' and 'powers' of monotheistic gods require us to suppose that there are ways in which those beings are actually infinite, there are cases in which considerations about the *deeds* and *actions* of those beings make it much more plausible to suppose that there are ways in which those beings are actually infinite, on the assumption that there are ways in which the universe itself is actually infinite.

8.2 Omniscience

Initially, one might be tempted to suppose that the analysis of omniscience is a more straightforward matter than is the analysis of omnipotence. As many authors have noted, there is strong intuitive support for the proposal that a being x is *omniscient* (at time t) iff for any truth that p (at time t), x knows that p (at time t). However, there are various difficulties that face the claim that this is, indeed, an adequate analysis of omniscience; and there are also various difficulties that face the claim that, if there is a monotheistic god, then that god is omniscient in the sense that is imposed by this analysis. At the outset of inquiry, it is conceivable that it should turn out that there is a secular concept of omniscience that cannot plausibly be attributed to any monotheistic god. We shall see.

8.2.1 True claims

My formulation of the 'standard' account of omniscience seems to involve quantification over *truths that p*: but how are we to understand this apparent quantification?

We might suppose that what is being quantified over here is *sentential* in nature: sentence-tokenings or sentence-types in some particular language. If we do suppose that what is being quantified over here is sentential in nature, then we might suppose that what the analysis proposes is that: x is omniscient iff all substitution-instances (in some particular language) of the schema *p only if x knows that p* are true.

Alternatively, we might suppose that what is being quantified over here is *propositional* in nature: non-linguistic entities that are the contents of sentence-tokenings or sentence-types in particular languages. If we do suppose that what is being quantified over here is propositional in nature, then we might suppose that what the analysis proposes is that: x is omniscient iff, for all propositions that p, p only if x knows that p.

If we suppose that what is being quantified over here is sentential in nature, then we face the difficulty of choosing the particular language to which the substitution-instances belong. Perhaps we can finesse this difficulty by considering all of the possible extensions – or enrichments – of a given language: x is omniscient iff all substitution-instances (in any possible enrichment of a particular language) of the schema *p only if x knows that p* are true. However, it is a nice point whether we can make sense of this proposal without supposing that we are thereby committed to quantification over propositions.

If we suppose that what is being quantified over here is propositional in nature, then we face the difficulty of providing a theory of propositions. There are many theories from which to choose. We might suppose that propositions are unstructured aggregations of entities: sets of possible worlds or the like. Alternatively, we might suppose that propositions are structured entities: ordered tuples of objects, properties, operations, modes of presentation and the like. If we suppose that propositions are structured entities, we might suppose that the constituents of propositions include concrete entities: physical objects, physical events and the like; or we might suppose that the constituents of propositions are all abstract: representations of concrete entities, representations of concrete events and the like. (This formulation leaves open questions about the characterisation of properties: some suppose that properties are concrete constituents of the world; others suppose not.)

Except where it seems to me to matter, I shall not fuss about these matters further. The key point to note, I think, is that, if we are to point to *counter-examples* to the proposed analysis of omniscience, then *either* we need to point to substitution-instances of the schema *p only if x knows that p* for which it is plausible to claim that it is possible that: x is omniscient,

and it is true that p, and yet x does not know that p; *or else* we need to construct a case in which x is not omniscient and yet in which there is no false instance of the schema *p only if x knows that p*. Of course, we may have other kinds of reasons for rejecting the proposed analysis: we shall consider some of these other kinds of reasons in due course.

8.2.2 Indexing

There is a large recent literature concerned with what Perry (1979) called 'the problem of the essential indexical'. Put briefly, the key observation that underlies this literature is that there are *prima facie* plausible reasons for supposing that what I come to know when I come to know some claim of the form 'I am F' is distinct from what I come to know when I come to know some claim of the form 'D is F', where 'D' is an expression that picks me out uniquely – at least given the circumstances in which it is tokened – but that does not pick me out *in the same way* that my use of the first-person pronoun picks me out. Of course, I should emphasise that there is nothing special about the choice of the first-person pronoun to illustrate the problem. It is equally true that there are *prima facie* plausible reasons for supposing that what someone comes to know when they come to know some claim of the form 'It is F now' is distinct from what they come to know when they come to know some claim of the form 'It is F T', where 'T' is an expression that picks out the time of utterance uniquely – at least given the circumstances in which it is tokened – but that does not pick out the time of utterance *in the same way* that it is picked out by use of the temporal indexical 'now'. And it is equally true that there are *prima facie* plausible reasons for supposing that what someone comes to know when they come to know some claim of the form 'It is F here' is distinct from what they come to know when they come to know some claim of the form 'It is F P', where 'P' is an expression that picks out the place of utterance uniquely – at least given the circumstances in which it is tokened – but that does not pick out the place of utterance *in the same way* that it is picked out by use of the locational indexical 'here'. And so on.

Most students of the relevant literature agree that I can fail to know that 'I am F' even though I know that 'D is F' for any expression 'D' that does not pick me out in the same way that my use of the first-person pronoun picks me out; and that I can fail to know that 'It is F now' even though I know that 'It is F T' for any expression 'T' that does not pick out the present moment in the same way that the temporal pronoun 'now' picks out the present moment; and that I can fail to know that 'It is F here'

even though I know that 'It is F P' for any expression 'P' that does not pick out location in the same way that the locational pronoun 'here' picks out location; and so forth. For example, I can know that *he* – a person indicated – is making a mess without realising that the indicated person is me; and I can know that Graham is making a mess without realising that I am making a mess, if, for example, I am suffering from amnesia; and I can know that the oldest child of Ted and Jean is making a mess without realising that I am making a mess, if I do not know that Ted and Jean are my parents; and so forth.

Responses to the problem of the essential indexical vary. Some suppose that it teaches us that propositions are not the objects of the (misleadingly named) propositional attitudes. Some suppose that it teaches us that there are different kinds of propositions; and, in particular, that there are 'essentially indexical' propositions that can only be accessed by those who are appropriately 'located'. Some suppose that it teaches us that at least some propositional attitude ascriptions advert to a non-propositional component that concerns the manner in which the proposition is presented to the subject of the attitude.

It is not clear that 'the problem of the essential indexical' does create a serious problem for the standard analysis of omniscience. The idea is that 'the problem of the essential indexical' provides us with cases in which all of the instances of the schema *p only if x knows that p* are true, and yet in which x is not omniscient. So, for example, while a putative omniscient being O can know that I am making a mess, 'the problem of the essential indexical' is supposed to establish that there is no way that O can know what I know, when I know that I am making a mess. But why should we suppose that the alleged fact that O cannot know what I know when I know that I am making a mess somehow counts against the claim that O is omniscient? Truly bizarre hypotheses aside, it is reasonable to hold that it is not even logically possible for another being to share my first-person perspective on the world; and that it is not even logically possible for a being that fails to share my temporal location to share my temporal perspective on the world; and that it is not even logically possible for a being that fails to share my spatial location to share my spatial perspective on the world; and so forth. So, unless we are prepared to accept that it is impossible for there to be an omniscient being in a world unless there is only one first-person perspective on that world, it seems that we do better to say that 'the problem of the essential indexical' does not provide us with cases in which all of the instances of the schema *p only if x knows that p* are true, and yet in which x is not omniscient.

If we suppose that there is a distinction between 'essentially indexical' propositions and the rest, then we can say that an omniscient being is not required to know 'essentially indexical' propositions. If we suppose that some propositional attitude ascriptions advert to a non-propositional component that concerns the manner in which the proposition is presented to the subject of the attitude, then we can say that an omniscient being is only required to know each proposition under at least one manner of presentation. If we suppose that propositions are not the objects of the propositional attitudes, then we can say that an omniscient being is only required to know those things for which it would otherwise be plausible to offer a propositional analysis. And so on. While there is something stipulative about the choice that is made here, I take it that it is not unreasonable to reserve the word 'omniscience' for the more interesting secular concept. (Since we can model what I take to be the less interesting secular concept mentioned above, it seems that we have at least *prima facie* grounds for supposing that it is not incoherent. Could we then construct an argument from 'dominance' to the conclusion that we ought therefore to call this less interesting secular concept 'omniscience'? I don't think so. While there is strong intuitive support for the claim that, if x is omniscient in w at t, then there is no being x' in w at t that knows all that x knows, and more besides, I do not think that there is strong intuitive support for the claim that any being that is omniscient in any world w at time t would cease to be omniscient if there were a second first-personal perspective on world w at time t.)

8.2.3 What it is like

There is another large recent literature that is concerned with questions about qualia, Jackson's knowledge argument, the alleged explanatory gap between claims about consciousness and claims about neural states, and so forth. At least on first acquaintance, it might be thought that some of the arguments from this literature can be adapted to raise difficulties for the proposed analysis of omniscience.

Plainly enough, our analysis entails that a being x is omniscient only if, for any claim of the form 'that is what it is like to F', it is true that *that is* what it is like to F only if x knows that *that is* what it is like to F. So, for example, *that is* what it is like to taste vegemite iff x knows that *that is* what it is like to taste vegemite. Given that there is something that it is like to F, it seems that we are obliged to insist that an omniscient being knows what it is like to F.

If we suppose that one can only know what it is like to F by having experiences of an appropriate kind, then we might think that the requirement that an omniscient being know what it is like to F, at least for any F for which it is true that some being knows what it is like to F, will have the consequence that orthodox monotheistic gods are certainly not omniscient. It is hardly orthodox to suppose that our world was made by a monotheistic god who has experienced the taste of vegemite, or the harmonies of the Buzzcocks, or the irritation of an itch in the middle of one's back, and so forth. Indeed, I suspect that it is not even orthodox to suppose that our world was made by a monotheistic god who knows what it is like to taste vegemite, or to listen to the Buzzcocks, or to have an itch in the middle of one's back, even if we suppose that one can know what these things are like without actually experiencing them.

There are various difficulties that confront talk about 'what it is like'. For example, it is not clear how we should limit the admissible substitution instances for F. Is it true that there are distinctive qualia associated with the possession of (exactly) two arms, (exactly) three arms, (exactly) four arms …? If so – and if knowing what it is like to F requires the undergoing of suitable experiences – then one can only be omniscient if one has had experience of the possession of (exactly) two arms, (exactly) three arms, (exactly) four arms … Pursuing this line of thought might well lead one to the conclusion that the admission of a multitude of distinctive qualia cuts strongly against the claim that it is possible for there to be an omniscient cognitive subject.

However, the most important difficulty that confronts talk about 'what it is like' turns on the interpretation of the second 'that' in the expression 'knowing that *that* is what it is like'. Consider the sentence 'That is what it is like to taste vegemite.' One might suppose that, in the canonical case, one can only grasp the proposition that is expressed by this sentence if one is currently experiencing the taste of vegemite, or (perhaps) if one is recalling an occasion on which one was experiencing that taste. If the demonstrative pronoun 'that' is to refer to anything here, it seems that it must refer to (past or present) occurrent experiences of speakers and hearers. And, in that case, it seems a short step to the conclusion that one can only know that *that* is what it is like to taste vegemite if one has experienced the taste of vegemite: for there simply is no other way of accessing that which is ostended by the demonstrative pronoun in the sentence 'That is what it is like to taste vegemite.'

If we suppose that, for typical human agents, there is no way of accessing that which is ostended by the demonstrative pronoun in sentences

of the form 'That is what it is like to F' without undergoing appropriate sensory experiences, we might nonetheless suppose that it is possible for a monotheistic god to access that which is ostended here in some other way. Perhaps a monotheistic god can know that *that* is what it is like to taste vegemite, even though that monotheistic god has never had any kind of occurrent experiences, sensory or otherwise. I do not think that I would want to take on this suggestion if I were a monotheist; for it seems to me to make it impossible to form any conception of what it is that our monotheistic god is alleged to know when it is said that it knows that *that* is what it is like to taste vegemite.

If we accept that claim that it is not possible for a monotheistic god to access that which is (allegedly) ostended by the demonstrative pronoun in sentences of the form 'That is what it is like to F,' then we might suppose that we have here a reason for supposing that monotheistic gods are not omniscient. Alternatively, however, following the model of the discussion in the previous section, we might suppose instead that it is not true that 'the problem of knowing what it is like' provides us with cases in which all of the instances of the schema *p only if x knows that p* are true, and yet in which x is not omniscient. Perhaps we might distinguish between propositions that advert to knowing what it is like, and propositions that do not advert to knowing what it is like. Perhaps we might try to introduce a distinction between propositional and non-propositional content, and insist that claims about 'knowing what it is like' advert to non-propositional content that need not be accessible to omniscient subjects. And so forth. As in the case of indexical attitudes, we might claim that, in order to arrive at an interesting secular conception of omniscience, we have no option but to insist that cases of 'knowing that that is what it is like' must be set to one side.

There is a third option that appeals most to me. I am sceptical that there is a straightforward, literal interpretation of claims of the form 'that is what it is like to F' which is both true and such that the initial 'that' is interpreted as a demonstrative pronoun. I think that, if one says 'I know that *that* is what it is like to F', one is expressing a proposition whose canonical form is more like this: *I have the ability to make certain kinds of discriminations and judgements on the basis of my experiences, without any further recourse to external standpoints of assessment*. At least roughly, I know that *that* is what vegemite tastes like just in case I can identify vegemite when it is placed on my tongue, even though I am blindfolded at the time. But, if we are prepared to countenance the claim that ordinary language expressions of the form 'I know that that is what it is like to F' do not wear

their propositional forms on their faces, then we can go on to maintain that our candidate formulation of an analysis of omniscience – a being x is *omniscient* (at time t) *iff* for any truth that p (at time t), x knows that p (at time t) – should be taken to quantify *only* over canonically expressed propositions that p. It seems plausible – to me, anyway – to suppose that it is no limit on omniscience that I lack abilities to make certain kinds of discriminations and judgements on the basis of my experiences, without further recourse to external standpoints of assessment, merely because I happen not to undergo the relevant kinds of experiences.

8.2.4 Alleged paradoxes

In a series of works beginning in the early 1980s, Patrick Grim (1983; 1985; 1988; 1991) defends the claim that a cluster of related logical results entail that there could not be an omniscient being, i.e. a being that knows all truths.[1] I shall begin by sketching each of the main kinds of argument that Grim supposes makes difficulties for the claim that it is possible that there is a being that satisfies our standard account of omniscience.

8.2.4.1 The divine liar

Suppose that there is an omniscient being X, and consider the following claim:

(*) X believes that (*) is not true.

If we suppose that (*) is true, then, plainly, it follows – by the familiar disquotational properties of truth – that X believes that (*) is not true. But,

[1] Grim (1991: 131) objects to the suggestion that an adequate analysis of omnipotence is contained in the claim that we have been exploring, viz. that a being x is *omniscient* (at time t) iff for any truth that p (at time t), x knows that p (at time t). For, according to Grim, it is possible that there is a being x of whom it is true both (1) that for any truth that p (at time t), x knows that p (at time t); and (2) that for at least some falsehoods that p (at time t), x believes that p (at time t). Yet, says Grim, we should hardly suppose that a being is omniscient if it has false beliefs. Grim's proposal, in the face of this difficulty, is to amend the analysis: we should say, instead, that a being x is omniscient (at time t) iff (1) for all p, p is true iff x believes that p; and (2) for all p, x believes that p iff x knows that p. However, it seems to me that it is very doubtful to suppose that it is possible for it to be the case that x knows that p given that x believes that not p: if I believe that p and I believe that not p, then, even if it is the case that p, it cannot be the case that I know that p. Given that it is not possible for it to be the case that x knows that p given that x believes that not p, we have no reason to retreat from the standard analysis of omniscience. Of course, those of us who think that there cannot be knowledge without belief will be happy to note that Grim's proposal is available as a back up: we can always retreat to his more complicated formulation if we are given good reason to do so. Those who think that there can be knowledge without belief – and, in particular, those who suppose that there is a monotheistic god that has knowledge but that does not have belief – are left to sort out their own potential mess.

if an omniscient being believes that (*) is not true, then – by the standard analysis of omniscience – it follows that (*) is not true. So, the assumption that (*) is true leads to contradiction.

Suppose, instead, that (*) is not true. That is, suppose that it is not true that X believes that (*) is not true. Given that an omniscient being fails to believe that (*) is not true, it follows – by the standard analysis of omniscience – that it is not true that (*) is not true. But – by the familiar disquotational properties of truth – if (*) is not true, then it is true that (*) is not true. So, the assumption that (*) is not true also leads to contradiction.

But, on the assumption that there is an omniscient being X, either it is the case that (*) is true, or it is the case that (*) is not true. So, on pain of contradiction, we seem driven to the conclusion that there is no omniscient being X.

8.2.4.2 The paradox of the knower

As Grim notes, there is some background work that needs to be done to set up this argument. We start with the first-order language described in Oppy (2006b: 34f.). We identify four non-logical symbols: the name *o*, the one-place function symbol *s* and two two-place function symbols · and +. The theory *Q* of *Robinson's arithmetic* consists of the logical closure under first-order predicate calculus of the following seven axioms: (1) $(\forall x)(\forall y)((sx = sy) \rightarrow (x = y))$; (2) $(\forall x)(o \neq sx)$; (3) $(\forall x)((x \neq o) \rightarrow \exists y(x = sy))$; (4) $(\forall x)((x + o) = x)$; (5) $(\forall x)(\forall y)((x + sy) = s(x + y))$; (6) $(\forall x)((x.o) = o)$; and (7) $(x)(y)((x.sy) = ((x.y) + x))$. Note that *Q* is a consistent theory, since all of its axioms are true in its standard interpretation in the natural numbers, in which *o* denotes zero, and *s*, · and + are the successor, multiplication and addition functions.

We shall say that an n-place function f is *representable* in a theory T if there is a formula $A(x, x_{n+1})$ such that, for any natural numbers p and j, if $f(p) = j$, then it is a theorem of the theory T that $(\forall x_{n+1})(A(p, x_{n+1}) \leftrightarrow x_{n+1} = j)$. Although it requires some work, it is not too hard to establish that all recursive functions are representable in *Q*. Moreover, it is also not too hard to establish that all of the sentences/formulae/expressions of the language of *Q* can be recursively encoded using the natural numbers, i.e. that a *gödel-numbering* can be established for the sentences/formulae/expressions of the language of *Q*. (More exactly, a gödel-numbering is an assignment of natural numbers – gödel-numbers – to expressions in a language that meets the following three conditions: (1) no two distinct expressions receive the same gödel-numbers; (2) the gödel-number of any expression can be effectively calculated; and (3) it is effectively decidable whether a

number is a gödel-number of some expression and, if so, it is effectively calculable for which expression it is a gödel-number.) Finally, given that we represent the gödel-number of an expression E by gn(E), it is easy to see that we can define a two-place relation I(x,y) on expressions in the language of Q such that, for any expressions A and B in the language of Q, if $B \vdash_Q A$ then $\vdash_Q I(gn(A), gn(B))$.

Suppose that we add a new non-logical one-place predicate symbol, **Δ**, to the language of Q. Then we can prove that the addition of all of the instances of each of the following three schemata: (1) $\Delta(gn(A)) \rightarrow A$; (2) $\Delta\, gn(\Delta(gn(A)) \rightarrow A)$; and (3) $I(gn(A), gn(B)) \rightarrow (\Delta\,(gn(A)) \rightarrow \Delta\,(gn(B)))$, to Q results in a trivially inconsistent theory Q'. We show this as follows:

> Define the *diagonalisation* of an expression A to be the expression $(\exists x)\,(x = gn(A)\ \&\ A)$. Then, it is not too hard to show that there is a recursive function *diag* such that, if n is the gödel-number of A, then diag (n) is the gödel-number of the diagonalisation of A. Moreover, it is also not too hard to show that, if T is any theory in which diag is representable, then, for any formula B(y) of the language of T that just contains the variable y free, there is a sentence G such that $\vdash_T G \leftrightarrow B(gn(G))$.

In particular, then, we have that there is a sentence S in q' for which it is true that $\vdash_{Q'} S \leftrightarrow \Delta\,(neg\,(gn(S))$, where neg (gn(S)) – another recursive function that is provably representable in Q' – is the gödel-number of the negation of S. From the first of the three sentence schemas that we added to Q, we have that $\vdash_{Q'} \Delta\,(neg\,(gn(S)) \rightarrow \sim S$. Hence, we have $\vdash_{Q'} S \rightarrow \sim S$, i.e. $\vdash_{Q'} \sim S$. Moreover, in view of the preceding derivation, we also have that $\vdash_{Q'} I(gn(\Delta(neg\,(gn(S)) \rightarrow \sim S), neg\,(gn(S)))$. But, from the second of the three sentence schemas that we added to Q, we have that $\vdash_{Q'} \Delta\,(gn(\Delta(neg\,(gn(S)) \rightarrow \sim S))$; and from the third of the three sentence schemas that we added to Q, we have that $\vdash_{Q'} \Delta\,(gn(\Delta(neg\,(gn(S)) \rightarrow \sim S)) \rightarrow \Delta\,(neg\,(gn(S))$. So $\vdash_{Q'} \Delta\,(neg\,(gn(S))$. Whence, since $\vdash_{Q'} S \leftrightarrow \Delta\,(neg\,(gn(S))$, it follows that $\vdash_{Q'} S$. So Q' is provably inconsistent, as advertised.

The key point to note about the above derivation is that it holds no matter what interpretation is given to **Δ**. So, for example, if we read **Δ** as 'is known by an omniscient god', then the above result tells us that we cannot consistently add all of the instances of the following three schemata to any consistent extension of Robinson arithmetic: (1) If an omniscient god knows that p, then p; (2) An omniscient god knows that, if an omniscient god knows that p, then p; and (3) If B is derivable from A (in an extension of Robinson arithmetic of the kind described above) and A is known by an omniscient god, then B is known by that omniscient god.

Yet, as Grim observes, it seems incontestable that all of the instances of (1)–(3) are true, if there is an omniscient god.

8.2.4.3 Expressive incompleteness and internal incompleteness

The two 'incompleteness' arguments that Grim offers against the possibility of omniscience are, in some sense, 'less formal and more philosophical' than the argument from the paradox of the knower. I shall consider each of these arguments in turn.

The idea behind Grim's argument from 'expressive incompleteness' is this: Suppose that a system has both of the following properties: (1) It is 'self-reflective', i.e. it can take each predicate that is expressible in the language of that system as an object; and (2) It is 'expressively complete', i.e. it has the capacity to express all of the properties of its objects. Then, on the one hand, there must be at least as many objects of such a system as there are predicates within it, since each predicate can be taken as an object. But, on the other hand, there must be more properties of objects than there are objects, since there must be at least one distinct property for each member of the power set of those objects. So, there can be no system that is both self-reflective and expressively complete. But it is clear that an omniscient being must be self-reflective, in the sense specified: it must be able to treat its own properties as objects (of knowledge). Hence, by the above result, there cannot be an omniscient being, since, for any self-reflective being, there are properties of its objects of knowledge of which it can form no conception.

Grim's argument from 'internal incompleteness' is a little more complicated. We begin, again, with the idea of a self-reflective system, i.e. a system that is capable of taking each of its expressible properties as an object. For any such system, consider the set of expressible properties $\{P_1, P_2, \ldots\}$ and the corresponding set of property objects $\{O_{P1}, O_{P2}, \ldots\}$. Consider any one-one function f between these two sets. For each property object O_P, and its associated property $f(O_P)$, there is a proposition $f(O_P)O_P$ that may or may not be a theorem of the system; hence, there is a set $O_{P'} = \{O_P: f(O_P)O_P$ is not a theorem of the system$\}$. If $O_{P'}$ is not expressible in our system, then the system is expressively impoverished. But if $O_{P'}$ is expressible in our system, then f must map some O_P – say, O_{P^*} – onto the property that is defined by the set $O_{P'}$. Now, let's consider whether $f(O_{P^*})$ applies to O_{P^*}. If $f(O_{P^*})$ applies to O_{P^*}, then $f(O_{P^*})$ O_{P^*} is a truth. But, by construction, f(OP*) applies to OP* iff $f(O_{P^*})$ O_{P^*} is not a theorem of the system. So the system is internally incomplete: there are truths that it fails to capture as theorems. If, on the other hand, $f(O_{P^*})$ does not apply

to O_{P^*}, then the formula $f(O_{P^*})\ O_{P^*}$ is not a theorem of the system. But, by construction, f(OP*) applies to OP* iff $f(O_{P^*})\ O_{P^*}$ is not a theorem of the system. So the assumption that $f(O_{P^*})$ does not apply to O_{P^*} leads to contradiction. Collecting the various parts of our argument, we have shown that any self-reflective system is either expressively incomplete, or internally incomplete, or both.

8.2.4.4 Cantorian quandaries

The 'short and sweet' version of Grim's Cantorian argument against the possibility of an omniscient being runs as follows: If there is an omniscient being, then what that being knows constitutes a set of all truths. But – by the Cantorian argument to follow – there is not, and, indeed, cannot be, a set of all truths. So there can be no omniscient being.

The Cantorian argument against the existence of a set of all truths runs as follows: Suppose that there is a set T of all truths. Consider all of the subsets of T, i.e. all of the elements of the power set P(T). To each element of this power set, there corresponds at least one truth. For example, a particular truth T_1 either does, or does not, belong to any given member of P(T). Hence, there are at least as many truths as there are elements of the power set P(T). But, by Cantor's power set theorem, the power set of any set has a higher cardinality than does the set itself. Hence, there are more truths than there are members of T, and no set of truths can fail to omit at least some truths. Contradiction. So, there cannot be a set of all truths.

8.2.5 Discussion of alleged paradoxes

Some of Grim's arguments have been discussed in the literature. In particular, the arguments from expressive incompleteness and internal incompleteness, and the 'short and sweet' Cantorian argument, have been fairly carefully examined.

8.2.5.1 The divine liar

As everyone knows, discussion of liar paradoxes is fraught with difficulty. When Grim (1991: 9–47) rehearses difficulties with the adaptation of a wide range of possible responses to the standard liar paradox – i.e. to the analysis of the claim:

(*) (*) is not true

– it is, I think, not too hard to agree with him that none of these responses seems intuitively satisfying. That is, it is not too hard to agree with Grim

that appeal to truth-value gaps, or truth-value gluts, or many-valued logics, or failure to express a proposition, or hierarchy, or whatever, does not seem to provide a satisfactory account of the divine liar. But, of course, we are only going to agree with Grim about these matters if we also suppose that appeal to truth-value gaps, or truth-value gluts, or many-valued logics, or failure to express a proposition, or hierarchy, or whatever, does not seem to provide a satisfactory account of the standard liar paradox. And therein, I think, lies the rub.

Grim himself supposes that, in the end, an appeal to hierarchy emerges as the strongest candidate for an adequate treatment of the simple liar paradox. Moreover, he claims that, on any satisfactory hierarchical approach, it turns out that there can be no set of all truths. So, according to Grim, while it is plausible to suppose that there is a hierarchical approach that provides a satisfactory treatment of the standard liar, it is also plausible to suppose that there is no satisfactory treatment of the divine liar: for, as he goes on to argue in the later parts of his book, there are good reasons to suppose that, if there is no set of all truths, then there is no omniscient being.

On the one hand, if we disagree with Grim about the prospects for hierarchical cases, then it seems to me that the divine liar provides no reason at all to think that there cannot be an omniscient being. The liar paradox is a problem for everyone; until we have found a satisfactory resolution to it, it would be premature to suppose that a satisfactory solution to the standard liar paradox will not also provide a satisfactory solution to the divine liar that is consistent with the possible existence of an omniscient being.

On the other hand, if we agree with Grim about the prospects for hierarchical cases, then the divine liar provides no *independent* reason to think that there cannot be an omniscient being: for the whole weight of the argument is now thrown onto the prospects for developing a satisfactory account of omniscience if there is no set of all truths, or proposition about all propositions, or the like. Against Grim's claim that consideration of the liar paradox and its ilk can teach us that there can be no coherent notion of omniscience, it seems to me that – as things stand – the liar paradox is simply mute on the question of the coherence of the notion of omniscience.

8.2.5.2 The paradox of the knower

The points that we made in our discussion of the divine liar apply with equal force to the case of the paradox of the knower. There are a number

of responses that have been suggested to the paradox of the knower – for example, to claim that truth and knowledge are only properly predicated of propositions and not, as the paradox of the knower supposes, of sentences; or to claim that truth and knowledge are only properly construed in terms of sentential operators rather than, as the paradox of the knower supposes, in terms of predicates; or to claim that truth and knowledge are only properly construed in terms of a hierarchy of predicates rather than, as the paradox of the knower supposes, in terms of a single predicate – none of which is evidently satisfying. If we suppose that none of these approaches is satisfying, then we have no reason to suppose that there is any particular problem that is made here for the notion of omniscience, since we shall need to wait to see what future work on this problem delivers. If – *contra* Grim – we suppose that one of the first two approaches is satisfying, then it seems that we can defuse the argument to the conclusion that the notion of omniscience is incoherent. And if – along with Grim – we suppose that only hierarchical approaches hold out any prospect of a genuinely satisfying treatment of the paradox of the knower, then the whole weight of the argument will be thrown onto the prospects for developing a satisfactory account of omniscience if there is no set of all truths, or proposition about all propositions, or the like. So, for all of the elegance of the paradox of the knower, it provides no particularly pressing reason to suppose that there is something wrong with the standard analysis of omniscience. If there is a pressing reason to suppose that there is something wrong with the standard analysis of omniscience, then it must reside in the remaining 'Cantorian' and 'Gödelian' arguments.

8.2.5.3 Expressive incompleteness and internal incompleteness

While there are features of Grim's argument from expressive incompleteness that will be addressed in our discussion of the 'short and sweet' Cantorian argument, there is one key point that seems to me to be worth making here. Even if we grant to Grim that we understand his language-independent accounts of 'self-reflectivity' and 'expressive completeness', it is quite unclear why we should suppose that it follows from these claims that, in a system that is both self-reflective and expressively complete, there must be more properties of objects than there are objects. Indeed, even if we grant that there is a property for each member of the 'power set' of the identified objects, it seems that it is still open to us to insist that there are 'proper class many' objects, and 'proper class many' properties of objects in any system that is both self-reflective and expressively complete. *Prima*

facie, then, it seems that Grim's argument from expressive incompleteness is not so much as valid.

As in the case of the argument from expressive incompleteness, there are features of Grim's argument from internal incompleteness that will be addressed in our discussion of the 'short and sweet' Cantorian argument. However, one point that I will note here is that the argument from internal incompleteness depends upon the assumption that, for any self-reflective system, there is a *set* of expressible predicates, and it also depends upon the assumption that there is a corresponding *set* of predicate objects. If – following the lead of the objection that we have already raised against the argument from expressive incompleteness – we suppose that there are 'proper class many' expressible predicates in a self-reflective system and/or that there are 'proper class many' corresponding property objects, then we shall reject one or both of these assumptions. Hence, as before, there is good *prima facie* reason to suppose that Grim's argument from internal incompleteness is not so much as valid.

Of course, in the light of the above objections, one might be given to wonder whether one can make sense of talk about there being 'proper class many' things. This is one of the central questions that emerge when we turn to consider the 'short and sweet' Cantorian argument that is the true cornerstone of Grim's attack on the standard analysis of omniscience.

8.2.5.4 Cantorian quandaries

There are two parts to Grim's 'short and sweet' Cantorian argument, each of which is open to challenge. On the one hand, one might challenge Grim's argument for the claim that there cannot be a set of all truths by challenging the use that Grim makes of Cantorian set theory; on the other hand, one might challenge the contention that, if there is an omniscient being, then what that being knows constitutes a set of all truths.

As Mar (1993: 436f.) observes, there are alternatives to Cantorian set theory in which 'Cantor's power set theorem' fails. So, for example, in Quine's 'New Foundations', there is a universal set that has the same cardinality as its own power set. While one might concede to Mar that there are some who do not find Quine's 'New Foundations' artificial and strongly counter-intuitive, it seems to me that there is a reasonably strong argument from the widespread acceptance of Cantorian set theory by working mathematicians to the conclusion that we ought not to give up on 'Cantor's power set theorem'. On the other hand, as I noted in Oppy (2006b: 29ff.), there is much that we do not understand about the foundations of set theory; it is not *inconceivable* that we might come to have

good *mathematical* reasons for modifying those parts of Cantorian set theory that are required to underwrite 'Cantor's power set theorem'. While – as Grim (1991: 98–113) argues – there is no *serious* competitor to Cantorian set theory that is currently on the market and that is consistent with the claim that there is a set of all sets, it can hardly be said that there are compelling reasons to suppose that no such competitor *could* be developed.

There is much more to be said against the contention that, if there is an omniscient being, then what that being knows constitutes a *set* of all truths. On the standard Cantorian picture, there is a universe of sets, but there is no set of all sets. Consequently, it is not very hard to come up with the suggestion that, while there is a universe of truths, there is no set of all truths: why shouldn't what goes for sets go for truths as well? Indeed, one might think that there is a *Cantorian* argument for the conclusion that there is a set of all sets just in case there is a set of all truths. For consider. Since each set can be mapped onto the truth that that set has the particular members that it has, there are at least as many truths as there are sets. Since each truth can be mapped onto the set that has just that truth as its sole member, there are at least as many sets as truths. So, there are just as many sets as there are truths, and we can establish a one–one mapping between them. But, then, the axiom of replacement guarantees that there is a set of all sets just in case there is a set of all truths.

Suppose, then, that there is a universe of truths. What is there to stop us from supposing, further, that there is omniscient being that knows every one of the truths in the universe of truths? True enough, if we are to talk about a 'universe' – or a 'proper class', or a 'collection', or an 'absolute infinity' – of entities, then we need to develop a theory of 'universes', or 'proper classes' or 'collections', or 'absolute infinities'. Moreover, as Grim (1991: 107) emphasises, it may not be easy to navigate a path between, on the one hand, overly restrictive principles of comprehension whose adoption would cripple standard mathematics, and unrestricted principles of comprehension that simply return us to the Cantorian arguments that we are hoping to escape. However, there is no obvious reason why we should not suppose that an appropriate theory of this kind could be developed. And, in any case, if there is no such theory to be given, then what are we to make of *Cantorian* claims about the universe of sets? In our formulation of Cantorian set theory in Chapter 2, section 1, we took it for granted that our variable ranged over sets, i.e. we took it for granted that the 'domain of quantification' for Cantorian set theory is the universe of sets. If we are not entitled to suppose that there is a universe of sets, then – it seems to me – we cannot even begin to formulate Cantorian set theory.

Grim (1991: 113ff.) considers the possibility that one might suppose that one can have quantification without totalities, i.e. without sets, or classes, or universes, or domains, or absolute infinities, or the like. Against this suggestion, he makes several objections. First, he claims that the only formal semantics that we have commits us to the existence of set-theoretic domains of quantification. And, second, he claims that it is possible to reformulate his argument without recourse to anything more than the use of quantifiers.

I think that there is an evident problem with the appeal to considerations about formal semantics: if Grim is right, then it seems that we cannot arrive at a coherent understanding of the semantics of Cantorian set theory. After all, Cantorian set theory quantifies over sets, and yet it denies that there is a set of all sets. If formal semantics requires a set-theoretic domain of quantification, then the combination of Cantorian set theory with formal semantics for that theory leads to contradiction. Not good. Rather than suppose that formal semantics requires set-theoretic domains, it seems to me that we do better to suppose that some domains of quantification are not sets; in any case, it seems clear that anyone who wishes to make use of Cantorian set theory had better be entitled to an assumption of this sort.

Grim offers several different arguments that 'have no recourse to anything more than quantification'. I shall focus on just one of these arguments here. This argument – which purports to establish that there cannot be a proposition that is genuinely about all propositions – runs as follows: Suppose that P is a proposition about all propositions, and consider all of the P-propositions it is about. If P is genuinely about all propositions, then there is a one–one mapping f from P-propositions to propositions *simpliciter*. Now, consider all P-propositions p such that the proposition f(p) to which they are assigned is not about them. Clearly, there is a proposition, P_d, about these P-propositions, of the form $(\forall p)((Pp \,\&\, \sim About(f(p)p) \rightarrow \ldots p \ldots)$. Suppose that p* is a P-proposition for which $f(p^*) = P_d$. If P_d is about p*, then, since P_d is a proposition about precisely those P-propositions that are such that f(p) is not about p, f(p*) of p* cannot be about p*. But this contradicts the assumption that $f(p^*) = P_d$. If P_d is not about p*, then, since P_d is a proposition about precisely those P-propositions that are such that f(p) is not about p, p* is a proposition such that f(p) is about p*. But this, too, contradicts the assumption that $f(p^*) = P_d$. So there is no P-proposition p* for which $f(p^*) = P_d$. So there can be no one–one mapping from propositions to propositions.

There are various questions that one might raise about this argument. One might suspect that talk about mappings, one–one mappings, functions and the like is really just talk about sets under other names. But if that is right, then it seems doubtful that this argument really 'has no recourse to anything other than quantification'. However, as Grim (1991: 118) observes, we can trade in all of this allegedly suspicious talk for talk about properties and relations. So perhaps we should be prepared to concede that Grim's argument need not trade in anything other than quantification.

A more serious problem with Grim's argument arises when we ask about the conclusion that we are supposed to be able to draw from it. If the conclusion is that there cannot be a proposition that is genuinely about all propositions, then it seems that that conclusion must be self-defeating: for it is, itself, a proposition that purports to be genuinely about all propositions! In the face of this difficulty, Grim (1991: 123) claims that the conclusions that he states ought properly to be interpreted as denials of the coherence of the basic notions involved therein: all attempts to reason about 'a set of all truths' or 'a proposition about all propositions' end in a tangle of contradictions. (Grim also considers the possibility that one might make judicious use of 'scare-quotes' in the rendering of his conclusions; but it is quite unclear how this would work, and Grim does not undertake to offer any illustrative examples.) But if Grim is right in claiming that we can make no sense of quantification over all propositions, or all sets, or the like, then – as we noted above – we lose much that we should not want to lose. In particular, we are driven to the conclusion that (the standard quantificational formulation of) Cantorian set theory is itself incoherent, a conclusion that Grim should surely not want to embrace.

While it is clear that there are further matters to be resolved here, it seems to me that Grim's Cantorian arguments do not strongly support the claim that we ought to revise the standard definition of omniscience. Perhaps Grim's discussion of 'other ways out' in the cases discussed earlier – truth-value gaps, truth-value gluts, many-valued logics, hierarchies, redundancy theories and the like – make it plausible that we currently have no idea how to construct a fully satisfying theory of quantification over all propositions, and the like. But it does not seem unreasonable to suppose that there is a satisfactory theory of this kind to be discovered; and it also does not seem unreasonable to suppose that, when we have discovered a theory of this kind, we shall then see that the apparent difficulties that arise for the standard analysis of omniscience fade away. At the very least, it seems to me that it would be premature to give up on the

standard analysis of omniscience in the light of the arguments that Grim has presented thus far: if there is a devastating objection to the standard analysis of omniscience that derives from considerations about quantification over certain kinds of totalities, it remains to be clearly established that this is so.

8.2.6 Deliberation

On the basis of the discussion to this point, it might be supposed that monotheists can rest content with the standard analysis of omniscience: perhaps it is true, after all, that a being is omniscient iff it knows all truths. However, even if there is no other evident class of potential counter-examples to the standard analysis, there are other reasons that one might have for asking questions about it. In this section, we shall consider an argument for the conclusion that an omniscient being cannot act intentionally; and then, in the next section, we shall explore the suggestion that traditional monotheistic conceptions of the cognitive powers of a monotheistic god run far beyond that which is vouchsafed by the traditional analysis of omniscience.

First, then, the argument for the conclusion that an omniscient being cannot act intentionally. The following formulation is to be found in Basinger (1986). It draws on earlier formulations of similar arguments by Reichenbach (1984) and Taylor (1964).

(1) To say that a person is omniscient is to say that [he] knows all that will happen, including all the decisions [he] will make and all the actions that [he] will perform.
(2) To say that a person is deliberating is to say that [he] is trying 'to decide or make up [his] mind about [his] own future possible actions, given certain beliefs, wants and intentions [he] has'.
(3) But 'a person at the same time cannot both know that [he] will do a certain action and deliberate about whether to do the same action'.
(4) [Therefore] If a being is omniscient, [he] cannot deliberate.
(5) To say that a person is acting intentionally is to say that [he] is acting in a rational, purposive, goal-directed manner to bring about what [he] desires.
(6) All intentional action necessitates deliberation.
(7) [Therefore] If a being is omniscient, [he] cannot act intentionally.

In response to this argument, Reichenbach (1984) accepts that an omniscient being cannot deliberate, but denies that intentional action must

always involve deliberation: there are some cases in which it seems plausible to say that a non-deliberating agent nonetheless acts intentionally because that agent is 'conscious of his goals and purposively undertakes to achieve them'. Against Reichenbach, Basinger (1986) objects that there are good reasons for rejecting the claim that all divine intentional actions are – or could be – the result of non-deliberative decisions. According to Basinger, while Reichenbach succeeds in undermining the argument for 7, his victory is 'shallow', since the *prima facie* conflict between omniscience and intentional action is not satisfactorily resolved by appeal to the distinction between deliberative intentional action and non-deliberative intentional action.

Apart from noting that the kinds of considerations to which Reichenbach appeals – for example, cases in which human intentional action is non-deliberative – are plainly insufficient to establish that all divine intentional actions are – or could be – the result of non-deliberative action, Basinger provides three reasons for supposing that orthodox monotheists should want to reject the conclusion that all divine intentional actions are – or could be – the result of non-deliberative decision. First, there is the act of creation: surely we should not want to say that our monotheistic god's creative activity only involved the initiation or implementation of a set of creative goals that were never formulated as the result of some kind of deliberation on the part of that god. Second, there is the question of response to petitionary prayer: surely we should not want to say that our monotheistic god's response to petitionary prayer is always on a par with the response of a father who non-deliberatively gives his son a glass of water when he is requested to do so; surely we should rather want to say that our monotheistic god's response to petitionary prayer is on a par with the response of a father who seriously weighs alternative responses to his son's problem before responding. Third, there is the question of divine freedom: if it is true that an omniscient monotheistic god never makes a deliberative decision, then – on a standard libertarian conception of freedom – it seems that that god never performs a free action; after all, it is never the case that such a being opts for one alternative rather than another after weighing up the considerations that count for and against each of these alternatives.

Whether or not one supposes that Basinger's cases support the contention that some divine intentional actions are the product of deliberative decisions, it seems to me that it is questionable whether there is good reason to suppose that a satisfactory analysis of omniscience ought to yield the result that an omniscient being is unable to deliberate. Moreover, it

also seems to me to be highly questionable to suppose that the standard analysis of omniscience that we have been examining does, in fact, yield this conclusion. The problem – as I see it – lies with the first premise in the argument that is set out above: it simply is not true that acceptance of the standard analysis of omniscience requires one to accept that *to say that a person is omniscient is to say that [he] knows all that will happen, including all the decisions [he] will make and all the actions that [he] will perform*. True enough, there are further assumptions that one might make that, together with the standard analysis of omniscience, do indeed entail that an omniscient being is unable to deliberate; but there are alternative assumptions that one might make that, together with the standard analysis of omniscience, fail to entail that an omniscient being is unable to deliberate.

Suppose – as many monotheists do – that we accept a libertarian analysis of freedom. Suppose, further, that we accept that, at a given point in the causal order, nothing is true that has not been made true by how things are in the causal order to that point. So, in particular, suppose that we accept that, if there are objectively chancy events causally downstream from a given point in the causal order, then there is no truth about the outcome of those events at the given point in the causal order. Given these assumptions, and given the further assumption that deliberation is itself an objectively chancy process, it seems to me that there is no inconsistency in the idea that an omniscient being can engage in deliberation: since the process of deliberation is objectively chancy, there is nothing to know about the outcome of the process of deliberation causally prior to the undertaking of that deliberative process.

The above account is couched in terms of the 'causal order'. However, it seems to me that this account can be adapted to show that it is possible for a temporal being to be both omniscient and a deliberative agent. Once again, we assume a libertarian analysis of freedom; and we assume that, at any time, nothing is true at that time that has not been made true by how things are up until that time. So, in particular, there are no truths about objectively chancy future events: there just is nothing up to the present time that determines how those future objectively chancy events turn out. On the assumption that deliberation is, itself, an objectively chancy event, then a being can be omniscient at time t (in the sense of the standard analysis of omniscience), engaged in deliberation at time t, and yet ignorant of how that deliberation will turn out.

Of course, this account of the connection between omniscience and deliberation is controversial: it relies on several contestable metaphysical assumptions. If you suppose that there cannot be objectively chancy

events – i.e. if you assume that the world is deterministic – then you cannot suppose that an omniscient being fails to know how the future goes, down to the last detail. If you suppose that deliberation is not an objectively chancy matter, then you cannot suppose that an omniscient being might fail to know how the course of future deliberation goes, down to the last detail. If you suppose that there are true counterfactuals of freedom – i.e. if you suppose that there are truths now about future objectively chancy events – then you cannot suppose that an omniscient being might fail to know how the future goes, down to the last detail. On any of these views – each of which has been accepted by some well-known monotheists – it seems to me that it will, indeed, follow that an omniscient being is unable to engage in deliberation.

Whether or not one supposes that Basinger's cases support the contention that some divine intentional actions are the product of deliberative decisions seems to me to depend upon the extent to which one adopts an anthropomorphic conception of the divine being under consideration. If one supposes that one's monotheistic god is a person, then it seems to me that one will likely share Basinger's intuition that that god engages in deliberative intentional action. However, if one supposes that one's monotheistic god is not happily characterised as a person – for example because one supposes that one's monotheistic god is a creative principle, or a trope, or a being that belongs to no ontological category that one can understand – then it seems to me that it is less obvious that one will share Basinger's intuition. Given the role that monotheistic gods are sometimes required to play – for example as ultimate stopping points for explanation, sufficient reasons for the existence of a contingent universe, and the like – it is not clear that it really makes sense to think of them as engaged in intentional action on the basis of deliberation. Or so it seems to me.

In short, then, it seems to me that considerations about deliberation do not count against the standard analysis of omniscience. On the one hand, if one supposes that an omniscient being ought to be able to deliberate, then there are not entirely outrageous metaphysical assumptions that one can make that allow you to maintain this supposition while also accepting the standard analysis of omniscience. On the other hand, if one does not suppose that an omniscient being ought to be able to deliberate, then the considerations raised in the argument that we have been considering simply have no bearing at all on the analysis of omniscience. Of course, if you suppose that an omniscient being ought to be able to deliberate, but you are not prepared to accept the 'not entirely outrageous metaphysical assumptions' just adverted to, then you face a choice: either you need to

amend the analysis of omniscience, or else you need to give up on the claim that your monotheistic god is omniscient. On the basis of the considerations that we have surveyed so far, I see no reason why one should not insist on the second course of action: there is, after all, no obvious reason why a creator of the universe, or a being worthy of worship, or an ultimate source of explanation, needs to be omniscient.

8.2.7 Divine cognitive power

The discussion of omnipotence in the previous section insisted on a distinction between the 'secular' concept of omnipotence and orthodox conceptions of the powers of monotheistic gods. One might suspect that a similar distinction ought to be insisted upon in the case of the discussion of the present section: on the one hand, there is the 'secular' concept of omniscience, and on the other hand, there are orthodox conceptions of the cognitive features of monotheistic gods. Before I turn to further consideration of a plausible account of the 'cognitive powers' of monotheistic gods, I shall briefly examine the discussion in Taliaferro (1985).

According to Taliaferro, the standard account of omniscience is manifestly inadequate as an account of 'divine cognitive power'. The difficulty that Taliaferro sees for the standard analysis emerges when one thinks about the different ways in which it could come to be the case that a being knows all truths. If A knows all truths without ever relying on the assistance of other cognitive agents in acquiring this knowledge, whereas B only knows some truths because of the (testimonial) assistance of A, and acquires knowledge of all other truths in the same way that A does, then there is a clear sense in which A is cognitively superior to B. If there is a chain of beings, A_j, $1 \leq j \leq 100$, such that A_i, $i > 1$ only knows all truths because of the direct (testimonial) assistance of A_{i-1}, whereas A_1 knows all truths without ever relying on the assistance of other cognitive agents in acquiring this knowledge, then it seems even more transparently clear that A_1 is cognitively superior to A_{1000}, even though there is no difference in the knowledge of truths that each possesses.

As Taliaferro admits, we need not suppose that his example points to a deficiency in the standard analysis of omniscience. One way to respond to the example is to claim that, while A and B (and A_1 and A_{1000}) are both omniscient, they nonetheless differ in their cognitive powers. Alternatively, one might suppose – as Taliaferro does – that the standard analysis of omniscience needs to be augmented with a further conjunct in which something is said about the cognitive powers of an omniscient agent. Of

course, if we decide to adopt the latter course, then we need to say what more there is to the cognitive powers of an omniscient agent. And this may not be a straightforward matter.

Taliaferro himself proposes that a being is only omniscient if it is metaphysically impossible for there to be a being with greater cognitive power; and, in particular, he proposes that a being is omniscient only if it infallibly and incorrigibly knows all true propositions without any evidential or rational mediation. It seems to me that there is at least some reason to suspect that a being can only infallibly and incorrigibly know those propositions that are traditionally classified as contingent *a posteriori* if it infallibly determines that they are true. Some classical monotheists maintained that their god's knowledge of contingent *a posteriori* propositions is due entirely to the fact that their god causes those propositions to obtain. I think that there is something to be said on behalf of this view, at least to the following extent: if one supposes that there are contingent *a posteriori* propositions that are not (causally) determined to obtain by a given monotheistic god, then one can only reasonably suppose that the monotheistic god has knowledge of the truth of those propositions if one supposes that there is a causal connection – and hence, in particular, an evidential connection – that runs back from the truth of those propositions to the god in question. But if this is right, then, on Taliaferro's preferred account of omniscience, a being can only be omniscient if it determines the truth-values of all contingent *a posteriori* propositions.

Taliaferro claims that a being that is such that 'the mere occurrence of some state of affairs … is sufficient for his knowing that state of affairs occurs' possesses unsurpassable cognitive power. But – to imitate his own example – if A knows all truths because A infallibly brings those truths to obtain, and B knows all truths only because they obtain, then we might suspect that there are grounds for claiming that the cognitive power of A exceeds the cognitive power of B. After all, B's knowledge is dependent upon – and causally subsequent to – the obtaining of the truths in question, whereas A's knowledge is not dependent upon – and not causally subsequent to – the obtaining of those truths. At the very least, it is hard to see how to decide which of A and B has the greater cognitive power on the basis of the information to hand.

On the basis of the above considerations, it seems to me that we do best not to amend the standard analysis of omniscience in the manner that Taliaferro proposes. Nonetheless, it seems to me that Taliaferro is right to suggest that we ought to directly investigate orthodox accounts of monotheistic gods, in order to determine whether it is plausible to suppose that

those gods are omniscient (on the standard analysis of omniscience), and also in order to determine what else might plausibly be said about the 'cognitive powers' of those gods. It is to this task that I now turn.

As I noted in my earlier discussion of omnipotence, there is a range of possible views that one might take about the knowledge of the powerful being that is postulated to be the creator of our universe. The most attractive view – it seems to me – is to suppose that the knowledge of the powerful being is limited both by logic and by position in the causal order: given that the powerful being is causally upstream from an objectively chancy part of the causal order, then the powerful being does not and cannot have full knowledge of that part of the causal order. Moreover, the powerful being cannot have knowledge that is forbidden by the essential nature of the powerful being: perhaps, for example, there is knowledge that a perfectly good being cannot have, but that a being that is not perfectly good can have. Of course, whether these are serious limitations depends upon what we take to be the essential properties of the powerful being in question, and upon the further metaphysical assumptions that we are prepared to make.

8.3 Omnipresence

While many theists claim that God is omnipresent, it is often not clear what is being claimed when it is claimed that God is omnipresent. Since theists typically suppose that God does not occupy any volume of space-time, and since any being that occupied every point of space-time would thereby occupy the entire volume of space-time, it seems that most theists must suppose that God is not located at – and does not occupy – any points of space-time. But, if God does not occupy any points of space-time, then what is supposed to be the literal content of the claim that God is omnipresent?

One possible thought here is that omnipresence is simply a consequence of omniscience and omnipotence. On the one hand, in virtue of divine omniscience, God knows what is happening at each location in space-time; on the other hand, in virtue of divine omnipotence, God is able to act at each location in space-time. However, if this is all that is meant by divine omnipresence – knowing what is happening at each location in space-time, and being able to act at each location in space-time – then omnipresence is not an independently interesting divine attribute.

Within theistic teaching, there are many different kinds of ways in which talk of 'divine presence' is understood. So, for example, theists may

suppose that God is *actively* present as providential guide of human affairs in every historical event; and that God is *judicially* present in every exercise of conscience; and that God is *attentively* present whenever someone makes a petitionary or intercessory prayer to God; and that God is *mystically* present in the Eucharist; and that God is *sacredly* present in cathedrals and other appointed places; and that God is *bodily* present in the Incarnation; and that God is *naturally* present at every point in the natural causal order; and so forth. But it is hard to see how any of this amounts to more than God's knowing what is happening at each location in space-time and acting at each location in space-time (if only in a conservative or concurrent way).

While – as we shall go on to discuss in Chapter 10 – there are difficulties involved both in understanding how God can know what is happening at each location in space-time given that God has no location in space-time and in understanding how God can act at particular locations in space-time given that God has no location in space-time, it is not clear that there are any other problems that arise in connection with the notion of omnipresence.

8.4 Other omni-attributes

It is sometimes suggested that there are omni-attributes other than omnipotence, omniscience and omnipresence. In particular, it is sometimes suggested that there is the omni-attribute of omnibenevolence, and that God might be properly characterised in terms of the three principal omni-attributes: omnipotence, omniscience and omnibenevolence. However, if we understand 'omnibenevolence' literally, then it is not clear that we should suppose that omnibenevolence is one of the central divine attributes – and, indeed, it is not entirely clear that we should even suppose that it is one of the divine attributes.

Benevolence, as standardly understood, concerns charity and desire to do good for others: one acts benevolently if one acts charitably and with a desire to do good for others. Do theists typically suppose that God is universally charitable, and universally concerned to do good for creatures? The evidence of Matthew 26:24 suggests not: for many theists, this text is evidence that God is not always concerned to do good for creatures, since, if God had been thus concerned, God would not have allowed Judas to be born. Of course, not all theists treat the Gospels as gospel; and even among those who do, some will have other ways of interpreting this particular text. So, even if some theists do not suppose that God

is omnibenevolent, there are doubtless other theists who do suppose that God is omnibenevolent.

However, even those theists who do suppose that God is omnibenevolent may well have doubts about whether omnibenevolence is a particularly central divine attribute. While, amongst the evaluative properties, God's goodness does seem to be particularly central, it is not clear that God's charity and desire to do good for creatures is anywhere near as central. On the other hand, those theists who suppose that God's central attribute is the possession of all perfections to the maximal possible extent might suppose that the divine perfections are all equally central: and, in that case, omnibenevolence and omnipresence would be no less central than omnipotence and omniscience.

CHAPTER 9

Freedom

Not all theists suppose that God acts and chooses freely. In particular, some theists suppose that there is only ever one way that God can act. However, many theists suppose that God is perfectly free: that is, that God possesses freedom to the greatest possible extent. We shall begin our investigation of divine freedom by examining two rather different conceptions of freedom. We shall then consider how these two different conceptions of freedom might be applied to God. Next, we shall consider some of the difficulties that arise in connection with the claim that God acts and chooses freely; in particular, we shall here pay some attention to the important arguments advanced in Rowe (2004). Finally, we shall briefly consider some of the ways in which God might be supposed to be a threat to human freedom.

9.1 What is freedom?

There are two broadly different views when it comes to the question of the primary bearer of freedom. On the one hand, there is the view that the primary bearer of freedom is action: what are primarily free or not free are the *actions* of agents. On the other hand, there is the view that the primary bearer of freedom is choice (or will): what are primarily free or not free are the *choices* of agents.

There are two broadly different views when it comes to the question of the causes of an agent's free actions. On the one hand, there is the view that the causes of an agent's free actions are events within, or states of, the agent. On the other hand, there is the view that the cause of an agent's free action is not an event within, or a state of, the agent, but rather just the agent herself. Shorn of necessary bells and whistles, the first kind of view says that an agent acts freely just in case her motives cause her actions. Shorn of necessary bells and whistles, the second kind of view says that an agent acts freely just in case the agent herself causes her actions.

There are also two broadly different views when it comes to the question of the causes of an agent's free choices. On the one hand, there is the view that the causes of an agent's free choices are events within, or states of, the agent. On the other hand, there is the view that the cause of an agent's choice is not an event within, or a state of, the agent, but rather just the agent herself. Shorn of necessary bells and whistles, the first kind of view says that an agent chooses freely just in case her motives cause her choices. Shorn of necessary bells and whistles, the second kind of view says that an agent chooses freely just in case the agent herself causes her choices.

In the case of the question of the causes of an agent's free actions, some of the necessary bells and whistles are common to the two views. In particular, both kinds of views say that freedom of action requires the absence of certain kinds of external impediments and constraints: for example, both views say that that, if I am bound hand and foot, then I am not free to run about. While considerations about external constraints loom quite large in discussions of political freedom, they are rarely so much as mentioned in discussions of individual freedom of action (perhaps because most of those discussions end up being discussions about individual freedom of choice).

9.1.1 Motives as causes

The view that an agent acts freely just in case her motives cause her actions is plainly in need of both clarification and qualification.

What are motives? Some philosophers have said motives are desires. Other philosophers have said that motives are a special class of desires: rational desires, or authentic desires, or virtuous desires, or desires that are desired to be effective, or desires that are authentically desired to be effective, or desires that are virtuously desired to be effective, or desires that are resiliently desired to be effective, and so forth. Some philosophers have said that motives are (deliberative) reasons. Other philosophers have said that motives are a special class of (deliberative) reasons: authentic (deliberative) reasons, or virtuous (deliberative) reasons, or resilient (deliberative) reasons, or the like. It is beyond the scope of the present chapter to explore these debates here.

What kinds of causes are motives? There is a familiar distinction between sufficient causes and necessary causes. If A is a sufficient cause for B, then A necessitates B: you are guaranteed to get B once you have A. If A is a necessary cause for B, A is necessitated by B: you can only get B if you

have A. If total causes are merely necessary but not sufficient, then total causes do not determine effects: rather, total causes determine a range of possible effects, and it is a chancy matter which of the possible effects actually arises. While there is nothing in the account of motives as causes that *requires* the causation in question to be non-chancy, I think that it is typically supposed that there is a non-chancy connection between causing motives and actions.

How do motives cause actions? Whatever motives may be, A's acting freely clearly depends upon her actions being caused in the right kind of way by her motives. If A's actions have only deviant causal connection to her motives, such that it would not also be correct to say that A acts on her motives, then it would be wrong to say that A acts freely. (Here, I take no stand on the further question whether, if A's motives are only deviantly connected to what A does, then it would also be wrong to say that A *acts*.)

How are motives acquired? Whatever motives may be, A's acting freely will most likely be taken to depend upon her motives having been acquired in the right kind of way. If A's motives are the result of brainwashing, or addiction, or trauma, or subliminal advertising, or the like, then we shall most likely judge that A does not act freely in acting upon those motives. This kind of judgement seems most clear in cases in which A's motives have been written or overwritten by another agent or group of agents: if B determines that A has a particular set of motives, then A does not act freely when A acts on the motives given to her by B.

Perhaps we can formulate a slightly revised version of the view as follows: *an agent acts freely just in case she acts on appropriate motives in the absence of relevant defeating conditions (concerning acquisition of motives and external constraint)*. Perhaps, moreover, we can give a parallel formulation for the related view about choices: *an agent chooses freely just in case she chooses on appropriate motives in the absence of relevant defeating conditions (concerning acquisition of motives)*.

It is worth noting that, on the further assumption that the connection between motives and actions or motives and choices is non-chancy, this formulation entails that A is unable to perform a different action, or make a different choice, *unless* her motives are different. While it is true that the agent *would* have been able to act or choose differently if her motives had been different, it is not true that the agent *could* have acted or chosen differently in the very circumstances in which she acted or chose (given that her motives are part of those circumstances).

9.1.2 Agents as causes

The view that an agent acts freely just in case she causes her actions is in need of the same kinds of clarifications and qualifications as the view that an agent acts freely just in case her motives cause her actions.

First, while there is nothing in the bare account that requires that the causation in question is non-chancy, I think that it is typically supposed that there is a non-chancy connection between the agent and her action. Second, if the agent's action has a deviant causal connection to her, then it may be that the agent does not act freely in performing that action. Third, there may be internal defeating conditions on freedom of action: if the agent is brainwashed, or addicted, or traumatised, or the victim of subliminal advertising, or the like, then it may be that the agent does not act freely in performing her action. Fourth, as noted earlier, there are external defeating conditions on freedom of action: if the agent is subject to certain kinds of external constraints – such as having a gun held to her head – then she may not act freely in performing her actions.

Perhaps we can give a more accurate formulation of the view concerning action as follows: *an agent acts freely just in case she is the non-deviant cause of her action in the absence of relevant internal and external defeating conditions*. And perhaps we can give a parallel formulation concerning choice: *an agent chooses freely just in case she is the non-deviant cause of her choice in the absence of relevant internal defeating conditions*.

While I have said that it is typically supposed that there is a non-chancy connection between the agent and her action, this claim will bear some further investigation. Proponents of this kind of view have often committed themselves to some kind of principle of alternative possibilities: that is, roughly speaking, to some version of the claim that the agent could have acted or chosen differently in the very circumstances in which she acted or chose. Of course, if 'the very circumstances in which the agent acted or chose' are 'the very *external* circumstances in which the agent acted or chose', then even those who suppose that an agent acts or chooses freely just in case her motives cause her actions or choices can agree that that agent could have acted or chosen differently in the very circumstances in which she acted or chose – for, had her internal states and processes been different in those very external circumstances, she may well have performed different actions or made different choices. But we are here to suppose that 'the very circumstances in which the agent acted or chose' *include* all of her internal states and processes: the idea is that the agent could have acted or chosen differently even though there was no change at

all in either her external circumstances or her internal states and processes leading up to the action or choice.

Suppose, then, that X makes a particular free choice C, or performs a particular free action A, in particular circumstances Z. Since the choice or action is free, we are to imagine that X was able to make a different choice C', or perform a different action A', in the circumstances Z. Suppose, then, that X had chosen C' or done A' in circumstances Z. What would then have explained X's choosing C' rather than C, or doing A' rather than A, in circumstances Z? Equally, what explains X's having chosen C rather than C', or doing A rather than A'? The answer seems to be that there is *nothing* that explains why X chooses C rather than C', or does A rather than A', and that there *could not be anything* that explained why X chose C' rather than C, or did A' rather than A.

Perhaps it might be suggested that there is a probabilistic explanation to be given: while, for example, X could have chosen C' rather than C, or done A' rather than A, it was much more likely that X would chose C rather than C', or do A rather than A', and that explains why X chose C rather than C', or did A rather than A'. However, plainly enough, this will not do in general: for if we suppose that we are in the domain of probabilistic explanation, then, while it may be true in particular cases that agents make the most probable choices and perform the most probable actions, there will be other cases in which agents make less probable choices or perform less probable actions. If we suppose that there is a chance connection between the agent and her choices or actions, then we give up on the idea that there is an explanation of why the agent made one choice rather than another, or performed one action rather than another: all that can be said is that that is how the chances played out. And, in particular, we then suppose that the internal states and processes of the agent – her beliefs, desires, values, character traits, judgements and deliberations – simply do not explain why she chose one way rather than another, or performed one action rather than another.

Given that we reject the suggestion that there is a chancy connection between the agent and her action, the sole remaining option – I think – is to claim that there are two primitive kinds of causation: state/event causation and agent causation. While, historically, proponents of agent causation have claimed to be motivated by a desire to avoid 'determinism', it is pretty clear that 'determinism' is really beside the point. If we suppose that all state/event causation is chancy, and yet also suppose that it is as close as you please to certain that all state/event causation would play out as it has, then we remove 'determinism' from the picture without making any

provision for the kind of freedom envisaged by proponents of agent causation. (It is no better that my mowing the lawn last weekend was made as near to certain as you please by the initial state of the universe and the laws, without being determined by the initial state of the universe and the laws, than it is that my mowing the lawn last weekend was determined by the initial state of the universe and the laws.) What proponents of agent causation are really after is a kind of 'spontaneity' of choice and action that is suitably independent of whatever state/event causation there may be: on the agent causation view, *free* choices and actions are simply not caused by any prior states or events (even including prior states or events of the agent herself).

9.2 How might God be free?

Questions about divine freedom can be divided according to the conception of freedom that is supposed to apply. We shall begin by considering the two views of freedom that we have already distinguished.

Suppose, first, that motives are causes. In this case, we suppose – at least roughly – that an agent acts freely just in case she acts on appropriate motives in the absence of relevant defeating conditions; and that an agent chooses freely just in case she chooses on appropriate motives in the absence of relevant defeating conditions. On this conception of freedom it seems unproblematic that God's actions and choices will be free: after all, there are no external constraints on God's initial actions and choices, and only irrelevant constraints on God's subsequent actions and choices; and there are no defeating conditions that could apply to God's acquisition of motives; and there can be nothing deviant about the connection between God's actions or choices and God's motives. Of course, this view requires that God has motives; hence, for example, it requires rejection of the doctrine of divine simplicity and the like. Theists who worry about anthropomorphism may well be unhappy with the attribution of motives to God.

While this conception of freedom appears to apply unproblematically to God's actions and choices, it is less clear that it applies unproblematically to agents who are created by God. In particular, the attribution of freedom as thus conceived to agents created by God might be threatened by the causal role that God plays in the possession of motives by those agents. As we noted above, if an agent B determines that an agent A has a particular set of motives, then A does not act or choose freely when A acts or chooses on the motives given to her by B. Thus, if we suppose that

God determines that created agents have particular sets of motives, then it would appear to follow that those agents cannot act or choose freely. But, on the state/event conception of motives as causes, there is at least some temptation to suppose that God could not *create* agents without causally determining the sets of motives that those agents possess. At the very least, it seems likely that some work will need to be done in order to reconcile the state/event conception of motives as causes with the claim that God creates other free agents.

Suppose, on the other hand, that agents are causes. In this case, we suppose – at least roughly – that an agent acts freely just in case she is the non-deviant cause of her action in the absence of relevant internal and external defeating conditions, and that an agent chooses freely just in case she is the non-deviant cause of her choice in the absence of relevant internal defeating conditions. On this conception of freedom, it also seems unproblematic that God's actions and choices will be free: after all, there are no external constraints on God's initial actions and choices, and only irrelevant constraints on God's subsequent actions and choices; and there are no internal defeating conditions on any of God's actions and choices; and there can be nothing deviant about God's causing of God's actions. Moreover, this view does not require that God has motives: this view does not require rejection of the doctrine of divine simplicity, and it is perhaps less vulnerable to – though it does not entirely escape from – worries about anthropomorphism that arise in connection with conceptions of God which ascribe choices and actions to God.

Again, while this conception of freedom appears to apply unproblematically to God, it is less clear that it applies unproblematically to agents who are created by God. In particular, the attribution of freedom as thus conceived to agents created by God might be threatened by the causal role that God plays in the actions and choices of those agents. In particular, if God causally determines that created agents undertake particular actions or make particular choices, then it will follow that those agents do not act or choose freely. Perhaps the threat is less serious on the conception of agents as causes than it was on the state/event conception of motives as causes, because it seems more plausible to suppose that God could create agents without causally determining the acts and choices of those agents. But, as before, it seems likely that there will be some work to do in order to reconcile the conception of agents as causes with the claim that God creates other free agents.

There are, perhaps, other views that one might take about divine freedom. I guess that some theists will want to say that divine freedom and

human freedom are utterly distinct: we should not expect that the same conception of freedom applies both to God and to creatures. There are at least two ways in which this thought could be played out. On the one hand, it might be supposed that, while one of the two conceptions of freedom that we have identified applies to God, the other conception of freedom applies to God's creatures. Perhaps, for example, it might be that, while God's actions are free because God non-deviantly causes God's actions in the absence of relevant internal and external defeating conditions, human actions are only free insofar as they are grounded in appropriate motives in the absence of relevant defeating conditions. Or perhaps it might be that, while God's actions are free because God's actions are grounded in appropriate motives in the absence of relevant defeating conditions, human actions are only free insofar as they are non-deviantly caused by human agents in the absence of relevant internal and external defeating conditions. On the other hand, it might be supposed that, while one of the two conceptions of freedom that we have identified applies to human beings, there is some other conception of freedom – perhaps one that we are not even equipped to understand – that applies to God. Plainly enough, taking this route would remove all worries about anthropomorphism implicit in the attribution of freedom to God (though, of course, at the expense of raising questions about how the attribution of freedom to God is then in the least bit intelligible to us).

9.3 Threats to divine freedom?

Rowe (2004) argues that God cannot be both perfectly good and significantly free. Rowe's argument requires the following assumptions:

(1) If there is a best possible universe that God can make, then, necessarily, God creates the best possible universe that God can make.
(2) If there is a collection of best possible universes that God can make, then, necessarily, God creates one of the best possible universes that God can make.
(3) If, for any possible universe that God can make, there is a better possible universe that God can make, then, necessarily, whatever God does, God is not perfectly good.

Rowe may be taken to argue as follows. Either there is a best possible universe that God can make, or there is a collection of best possible universes that God can make, or for any possible universe that God can make, there

is a better possible universe that God can make. If there is a best possible universe that God can make, then God must create it, and hence is not free with respect to creating it. If there is a collection of best possible universes that God can make, then God must create one of them, and hence is not significantly free with respect to the creation of universes. If, for any universe that God can make, there is a better possible universe that God can make, then, whatever God does, God is not perfectly good. So either God is not perfectly good, or God is not significantly free to create a universe other than ours. Moreover, Rowe adds, it is not plausible that our universe is the best possible universe that God can make, or one of the best possible universes that God can make. So, if God exists, God is not perfectly good. Moreover, if we make the further assumption:

(4) If God exists, then God is the necessarily existent, essentially omnipotent, essentially omniscient, essentially perfectly good sole creator *ex nihilo* of our universe

then we can conclude from (1)–(4) that God does not exist.

Clearly, Rowe's argument depends upon the assumption that an agent acts freely just in case she causes her actions, and hence upon denial of the competing assumption that an agent acts freely just in case her motives cause her actions. If we suppose that an agent acts freely just in case she acts on appropriate motives in the absence of relevant defeating conditions (concerning acquisition of motives and external constraint), then we shall have no difficulty with the idea that God acts freely in creating the best possible universe that God can make, or one among the best possible universes that God can make, even if it is true that God could not have had motives other than the ones that God actually possesses. It is only if we suppose that an agent acts freely just in case she is, but her motives are not, the non-deviant cause of her action in the absence of relevant internal and external defeating conditions – and, in particular, if we suppose that it follows from this view that an agent acts freely just in case that agent could have acted differently in the very circumstances in which she acted – that we shall suppose that God cannot act freely in creating the best possible universe that God can make if it is necessary that God should perform this action.

If we accept the assumption about freedom identified in the preceding paragraph, then we might think that we can extend Rowe's argument to get a conclusion that is just about freedom (and not partly about either God's existence or God's perfect goodness). For, if we accept (2), then perhaps we should also accept:

(5) If, for any possible universe that God can make, there is a better possible universe that God can make, then, necessarily, there is a 'cut-off' on the goodness of universes that God can make below which God cannot stray, and necessarily, God creates one of the universes above this 'cut-off'.

Just as the selection of one universe from a bunch of equally good universes is not a significant exercise of freedom, so, too, one might think, the selection of one universe from a bunch of universes, all of which it would be perfectly acceptable for one to create, is also not a significant exercise of freedom. But, from (1), (2) and (5), we can conclude that God is not *significantly* free with respect to the creation of universes. Of course, Rowe himself will not accept this further argument. For Rowe accepts 'Principle B': 'If an omniscient being creates a universe when there is a better universe that it could have created, then it is possible that there exists a being morally better than it.' Thus Rowe supposes that if, for any possible universe, there is a better possible universe, then there cannot be an omnipotent, omniscient, perfectly good being that creates one of those possible universes. And so Rowe would reject (5).

There is reason to think that, if our extended argument is successful, then it generalises: *whatever* God does, given the rest of God's nature, God cannot be *significantly* free with respect to those actions. For, if we accept (1), (2) and (5), then it is plausible that we shall accept the following principles:

(1*) If there is a best possible action that God can perform, then, necessarily, God performs that action.

(2*) If there is a collection of best possible actions that God can perform, then, necessarily, God performs one of those actions.

(5*) If, for any action God can perform, there is a better action that God can perform, then, necessarily, there is a non-arbitrary 'cut-off' on the actions that God can perform, and God performs one of the actions above this 'cut-off'.

And, given (1*), (2*) and (5*), it might be thought to follow that God is not significantly free with respect to any actions that God performs. Of course, Rowe would not accept this extended argument. For Rowe would accept 'Principle B*': If a being performs an action when there is a better possible action that it could have performed, then it is possible that there exists a being morally better than it.

Given Principle B*, if, for any action that God can perform, there is a better action that God can perform, then it would follow that it is possible

that there is a being that is morally better than God. But, of course, on the assumption that God is necessarily existent and essentially perfectly good, there cannot be a being that is morally better than God. So, given Principle B*, (5*) must be rejected.

Setting Rowe's scruples aside for now, what should theists say about our line of reasoning in favour of the conclusion that God cannot act with significant freedom? Holding fixed the idea that agents are causes – and, in particular, holding fixed the idea that this is true both for God and for creatures – there are two main questions that arise. First, can theists reject one or more of the principles (1*), (2*) and (5*) that are assumed in the reasoning? Second, can theists deny that it follows from the principles (1*), (2*) and (5*) – in combination with the conception of God as an omnipotent, omniscient, perfectly good agent – that God does not, and indeed cannot, act with *significant* freedom?

(1*) seems compelling. If there is a unique best possible action that God can perform, and God is essentially omnipotent, essentially omniscient and essentially perfectly good, then how could God fail to perform that action? Moreover, if God must perform the unique best possible action that God can perform, then, on the assumption that agents are causes, it is clear that God is not free – let alone significantly free – with respect to this action. (To ward off one possible line of objection: here, and throughout, I assume that 'doing nothing' can count as one possible action. If you do not like this stipulation, feel free to reformulate the entire discussion in terms of the 'options' that are faced in choice situations, where 'doing nothing' may be one of the 'options' in question.)

(2*) also seems compelling. If there is a collection of best possible actions that God can perform, and God is essentially omnipotent, essentially omniscient and essentially perfectly good, then how could God fail to perform one of those actions? Moreover, if God must perform one of the actions in the collection of best possible actions, then, on the assumption that agents are causes, while God is free with respect to the choice of action from the collection of best possible actions, God is not free with respect to performing *one* of the actions in that collection. But, given that God must perform one of the actions from the collection of best possible actions – and given that all of the actions in the collection are *best possible* actions – there is no significance that attaches to the choice of the action. In this case, while God acts with freedom, God does not act with significant freedom, because there is no import that attaches to the choice of one action rather than another from the collection of best possible actions.

(5*) is perhaps not quite so compelling, but there is quite a bit to be said in defence of it. If there is an infinite collection of actions, any one of which God can perform if God arbitrarily selects it from the collection, and the best meta-action that God can perform is to arbitrarily select an action from the collection in question, and God is essentially omnipotent, essentially omniscient and essentially perfectly good, then how could God fail to arbitrarily select one of the actions from the collection, and then perform it? Moreover, if God must arbitrarily select one of the actions from the collection, then, on the assumption that agents are causes, while God is free with respect to the selection made from the infinite collection, God is not free with respect to the making of a selection from the infinite collection. But, given that God must make a selection from the infinite collection – and given that the selection from the infinite collection must be arbitrary – there is no significance that attaches to the choice of the action from the collection. In this case, while God acts with freedom, God does not act with significant freedom, because there is no import that attaches to the choice of one particular action from the infinite collection of 'available' actions.

Why would Rowe dissent from this defence of (5*)? I have assumed that the infinite collection of actions, from which God arbitrarily chooses one, is itself non-arbitrarily defined: there is a bright line between actions that belong to the collection and actions that do not so belong. God must perform one of the actions from the identified infinite collection of actions, and must arbitrarily choose an action from that infinite collection. Rowe argues, in effect, that if a being were required to perform one of the actions from a proper sub-collection of the identified collection – with some series of the worst possible actions omitted – then that being would have better ('higher') standards than, and so would be better than, a being that is required only to perform one of the actions from the full collection. I reply that the standards of a perfect being – an omnipotent, omniscient, perfectly good being – cannot themselves be dependent upon arbitrary choices. Any choice of a point to which to raise the 'cut-off' on permissible actions would be arbitrary; hence, no such point could figure in a fundamental way in the standards of a perfect being. Moreover – and more importantly – I insist that the standards of the perfect being would be *better* than the 'higher' standards of a being which relied upon an arbitrary choice in order to set a 'cut-off' on its permissible actions: the standards of the perfect being would be better because only the standards of the perfect being 'carve value at its joints'.

Even if it is accepted that Rowe does not provide a good reason to dissent from (5*), there may be other good reasons to dissent from it. Moreover, even if there is good reason to accept the conclusion that God cannot act with significant freedom given that agents are causes, it is not clear that this upshot is damaging to theism. Rowe suggests that, if God cannot act with significant freedom, then God cannot act with moral responsibility, and that, unless God is morally responsible for God's actions, God cannot be praiseworthy for the actions that God performs. If we suppose that God can only be worship-worthy if God is praiseworthy for the actions that God performs, then it might seem that the claim, that God cannot be praiseworthy for the actions that God performs, threatens something that really is central to theistic belief: namely, the claim that God is (essentially) worship-worthy. But it seems to me to be rather doubtful whether theists are required to suppose that God can only be worship-worthy if God is praiseworthy for the actions that God performs.

While I am myself sceptical that anything could be worship-worthy – and hence while there might well be good reason for those who suppose that God is worship-worthy to be doubtful about the value of my further opinions on this matter – it seems to me that, if there could be something that is worship-worthy, then that thing could be worship-worthy even if it were not praiseworthy for the actions that it performed. Setting aside the views of those theists who suppose that it is idolatrous or a product of undue anthropomorphism to suppose that God is an agent, it seems that at least some theists might reasonably suppose that there are other dimensions of God in virtue of which God is worthy of worship *even though* God is not praiseworthy for the actions that God performs. Perhaps, for example, God is worthy of worship because God is awesome, or because God is fundamental, or because God is perfect, or for all of these and other reasons besides. At the very least, it seems to me that there is a significant portion of logical space that here remains to be mapped.

9.4 Divine threats to human freedom

There are various ways in which the existence of God might be taken to threaten human freedom. Some people have worried that God's *omniscience* threatens human freedom. Some people have worried that God's *providence* threatens human freedom. Some people have worried that God's *fundamentality* threatens human freedom. Some people have worried that God's *causal ultimacy* threatens human freedom. Some people

have worried that God's role as *architect* of our universe threatens human freedom. And so forth. But if there are divine threats to human freedom, then the most serious threat is afforded by the conjunction of these individual threats: that is, the most serious divine threat to human freedom resides in the *combination* of God's fundamentality, and God's causal ultimacy, and God's omniscience, and God's providence, and God's architecture of our universe, and so forth.

Some theists suppose that, when God created our universe, God knew exactly which universe was being brought into existence. According to these theists, at that point in the causal order at which God brought our universe into existence – say, by causing the existence of an initial singularity – God knew exactly how the future of our universe would unfold, down to the very smallest detail. In particular, then, when God brought our universe into existence, God knew exactly how each agent was going to act in each set of circumstances in which that agent was going to be placed. Moreover, when God brought our universe into existence, God did so having taken account of what each agent would do were they placed in any of the possible circumstances in which they might be placed in any of the universes that God might have created.

If we take the view that an agent acts freely just in case she acts on appropriate motives in the absence of relevant defeating conditions (concerning acquisition of motives and external constraint), then it is hard to see how it could be that human agents act freely given the foregoing account of God's creative activities. For, on this account, God's creative choice/activity *determines* the motives that human agents act upon in every single circumstance in which human agents act upon motives. Given that God decides to make a universe in which *this* human agent acts upon *these* particular motives in *those* particular circumstances, and given that God takes account of the fact that *this* human agent would act upon *these* particular motives in *those* particular circumstances, there is no question but that God's creative choice/activity determines that *this* agent acts upon *these* motives in *those* circumstances. So, on the view in question, there is a relevant defeating condition in place: for, on the view in question, in order for an agent to act freely, it must not be the case that her motives are determined by some other agent.

If we take the view that an agent acts freely just in case she is the nondeviant cause of her action in the absence of relevant internal and external defeating conditions, then it is no easier to see how it could be that human agents act freely given the currently contemplated account of God's creative activities. For, on that account of God's creative activities,

God's creative choice/activity determines what the agent will do in every circumstance in which the agent acts. Given that God decides to make a universe in which this human agent acts in these ways in those particular circumstances, and given that God takes account of the fact that this human agent would act in these ways in those particular circumstances, there is no question but that this agent does act in these ways in those circumstances. In other words, there is no question but that God's creative choice/activity is *a* sufficient cause of this agent's performing these actions in those circumstances. So, on the view in question, there is a relevant defeating condition in place: for, on the view in question, in order for an agent to act freely, it must be that the *sole* sufficient cause of an agent's actions is the agent herself.

I conclude that, if, at that point in the causal order at which God creates a universe, God knows exactly which universe is being created, then there is no way that that universe can contain free agents. While some theists will suppose that, if I were right about this, that would be bad news, it seems to me that this would not be an unhappy result. After all, on the view in question, it is hard to see what reason God could have for creating a universe. Given that any universe that God makes must conform precisely to God's pre-conception of it, and given that God has complete knowledge of every possible universe that God might make, it is hard to see how God could find any value in the creation of some particular universe.

Some theists suppose that, when God created our universe, God had quite restricted knowledge about which universe was being brought into existence. According to these theists, at that point in the causal order at which God brought our universe into existence – say, by causing the existence of an initial singularity – God did not know how the future of the universe would unfold at particular places and times (and, hence, God did not choose to make this particular universe taking into account how it – and other possible universes – *would* unfold at particular times and in particular places). No doubt God had global knowledge about what the future of the universe would be – for example, God doubtless knew that protons would decay after about 10^{40} years – but God had no knowledge of the local ways in which chance and, in particular, agent causation, would play out.

If we take the view that an agent acts freely just in case she acts on appropriate motives in the absence of relevant defeating conditions (concerning acquisition of motives and external constraint), then it seems relatively easy to see how it could be that human agents act freely given

this second account of God's creative activities. For, so long as there is no subsequent activity in which God engages that determines the motives upon which human agents act, there will be no satisfaction of relevant defeating conditions for the claim that some human agents act freely in some circumstances. Of course, there is nothing in this account that rules out God's making non-initial causal interventions in the evolution of the universe; all that matters, for present concerns, is that, whatever further interventions God might make, those interventions do not determine the motives upon which human beings act.

If we take the view that an agent acts freely just in case she is the non-deviant cause of her action in the absence of relevant internal and external defeating conditions, then it seems no harder to see how it could be that human agents act freely given our second account of God's creative activities. For, so long as there is no subsequent activity in which God engages that determines what agents will do in the circumstances in which they act, there will be no satisfaction of relevant defeating conditions for the claim that some human agents act freely in some circumstances. And, again, there is nothing in this account that rules out God's making non-initial causal interventions in the evolution of our universe; all that matters, for present concerns, is that, whatever further interventions God might make, those interventions do not determine how human agents act.

I conclude that, so long as God has quite restricted knowledge about the future of the universe that God brings into existence – because there is no knowing how chance and/or agent causation will be played out in advance of their being played out – there is no serious difficulty that confronts God's making a universe in which there are free agents who perform free actions. Moreover, I conclude that it is *only if* God has quite restricted knowledge about the future of the universe that God brings into existence – because there is no knowing how chance and/or agent causation will be played out in advance of their being played out in the universe – that there is no serious difficulty that confronts God's making a universe in which there are free agents that perform free actions. One benefit of this conclusion is that it may go some way towards explaining how God could have a reason to create a universe: for while, of course, God knows all of the ways that a given universe *could* go, the way that a given created universe goes has some measure of independence from God on the scenario now in play.

CHAPTER 10

Incorporeality

Swinburne (1979: 8) takes it to be a definitional consequence that God is 'a person without a body, i.e. a spirit'. While some theists might wish to take issue with the claim that it follows from the definition of God that God is incorporeal, I take it that almost all theists agree with Swinburne that God *is* essentially incorporeal. Moreover, I take it to be close to universal opinion amongst theists that God's essential incorporeality entails that God is not an occupant of our physical space, that God is not located – or localisable – on a manifold that encompasses our physical space, and that God does not have a material constitution. However, I take it to be widespread opinion amongst theists that God is a causal agent who acts on the basis of reasons. The question to be explored in what follows is whether there is tension between, on the one hand, the view that God is essentially incorporeal, and, on the other hand, the view that God is essentially a causal agent who acts on the basis of reasons.

10.1 Preliminary remarks

Here is a picture. At the beginning of the causal order, God alone exists. Since God alone exists, there is no space-time to which God belongs, and there is no topological manifold with time-like and space-like dimensions within which God is located. *A fortiori*, God is dimensionless and occupies no volume of space-time. Moreover, since there is no manifold to support a distribution of quantum fields, God is not characterisable by way of possession of conserved quantities: God has no mass/energy, no charge, no spin and no constitution from fundamental particles. Nonetheless, purely through an act of will, God causes the existence of a quantum-field supporting manifold, part of which evolves into our observed universe. While God's causal activity maintains this quantum-field supporting manifold in existence, and while God also makes differential causal contributions at particular locations in this quantum-field supporting manifold, it is

not the case that there is a broader manifold within which both God and this quantum-field supporting manifold are located. Although causation within the quantum-field supporting manifold is intimately tied to the causal structure of the manifold and the particular quantum fields that are distributed over it, none of the various kinds of divine causation is mediated either by manifold structures or quantum-field distributions: divine causation is all entirely a matter of unmediated acts of will.

This picture raises various questions. Can there be unlocated causal entities? Can there be minds without physical substrates (embodied brains or the like)? Can there be agents without physical substrates (embodied brains or the like)? Can there be action on a manifold by an agent who is not located in that manifold? Can there be causation that does not involve the transfer of conserved quantities within a manifold? Even if there can be unlocated causal entities, minds without physical substrates, agents without physical substrates, action on a manifold by an agent who is not located in that manifold, and causation that does not involve transfer of conserved quantities within a manifold, can an 'external' agent do more than create a manifold and then sustain it in existence – i.e. can there be 'special' 'external' agency on a manifold as well as 'general' 'external' agency on a manifold? Finally, if some of these questions receive 'unfriendly' answers, are there ways in which our initial picture might be revised to retain some kind of theism?

10.2 Location

One of the hotly contested topics in early modern philosophy concerned the status of *space*: Is space something over and above relations between things? More exactly, the question was: Is physical space something over and above relations between physical bodies? In more recent philosophy, the question has become: Is *space-time* something over and above relations between physical entities? These questions should be carefully distinguished from questions about *motion*: Are *velocities* something over and above relations between physical entities? Are *accelerations* and *rotations* something over and above relations between physical entities? Many philosophers have thought that, even if accelerations and rotations are something over and above relations between physical entities, it is not the case that space-time is something over and above relations between physical entities.

If we suppose that space-time is nothing over and above relations between physical entities, then questions immediately arise about how

spatio-temporal relations between physical entities are connected to other relations between physical entities. Are spatio-temporal relations between physical entities *fundamental*, or are they grounded in other relations between physical entities? In particular, how are spatio-temporal relations between physical entities connected to *causal* relations between physical entities? Are causal relations between physical entities less fundamental than spatio-temporal relations between physical entities?

If we suppose that causal reality is more extensive than physical reality, a question arises about the external relations that characterise the frame of causal reality. It seems plausible to suppose we have the same range of options for causal reality that we have for physical reality. On the one hand, it might be that the frame of causal reality is something over and above the relevant external relations; on the other hand, it might be that the frame of causal reality is nothing over and above the relevant external relations. Moreover, we face the same kinds of questions about the connection between causal relations and relevant external relations that we faced in the case of physical reality: it might be that the relevant external relations are more fundamental than causal relations; or it might be that causal relations are more fundamental than the relevant external relations; or it might be that neither one of causal relations and relevant external relations is more fundamental then the other.

Theists who suppose that the frame of causal reality is something over and above the relevant external relations will, it seems, end up with a commitment to the claim that God has a location – or trajectory – within that frame. Of course, this is not to say that such theists end up with a commitment to the idea that God has a location or trajectory within space-time. Rather, on this view, it turns out that space-time is something like a sub-manifold of a more extensive manifold, and God has a location or trajectory within the more extensive manifold that does not overlap with the sub-manifold that is our space-time. (The coherence of this kind of nesting of manifolds is perhaps established by the coherence of inflationary models in which, for example, our manifold is a bubble in a background de Sitter space.)

Theists who suppose that the frame of causal reality is nothing over and above the relevant external relations will also, it seems, end up with a commitment to the claim that God has a location – or trajectory – within that frame. Of course, unlike those theists who suppose that the frame of causal reality is something over and above the relevant external relations, these theists will not be committed to the claim that God's location or trajectory is *fundamental*: for these theists, God's 'having a location or

trajectory' amounts to nothing more than God's standing in the relevant external relations to everything else. Moreover, on this view, it does not turn out that the relations in which God stands to familiar physical things are of the same kind as the relations in which physical things stand to other physical things: God does not have *the same kind of* location or trajectory that a physical thing has.

I anticipate that some theists will insist that there is a third option: rather than claim either that God is embedded in a manifold characterised by a system of external relations, or that God is embedded in a system of external relations that at least loosely speaking constitute a manifold, say instead that there are no external relations in which God participates. The obvious difficulty with this claim is that causation requires external relation: if one thing is a cause of a second, then the two things must stand in some kind of external relation to one another. In particular, if God is a causal agent, then it must be that God is embedded in some kind of system of external relations.

Even if it is granted that causal agents must be embedded in systems of external relations, I anticipate that it may be objected that causal relations might themselves be taken to be sufficient to meet this demand for external relations (or that causal relations might be taken to be sufficient to ground whatever further external relations are required). Against this, it is tempting to observe that, while spatio-temporal relations are metrical, causal relations are insufficient to generate a metric. I suppose that it might be replied that, whereas spatio-temporal relations are metrical, the background system of external relations within which God is located is not metrical. But even if we accept that systems of external relations need not be metrical, it is not clear that we should accept that causal relations can be *fundamental* external relations.

It is, I think, not very controversial to claim that spatio-temporal relations are *not* reducible to causal relations. In the framework of general relativity, we have external relations that are also causal relations – time-like and light-like relations – but we also have external relations that are not causal relations – space-like relations. On the assumption that something like this feature of general relativity will be preserved in future physical theories, we have strong grounds for thinking that there are spatio-temporal relations that are not grounded in causal relations. But, if that is right, then we have strong grounds for thinking that the fundamental system of external relations is not grounded solely in causal relations.

Perhaps it might be objected that, even if it is not true that the fundamental system of external relations is grounded in causal relations, it

might nonetheless be true that the system of external relations within which God is embedded is entirely grounded in causal relations. To test out this proposal, suppose that there are at least two things other than God that belong to the non-spatio-temporal part of reality in which external relation is entirely grounded in causal relations. Suppose further – as is widely accepted by theists – that, while God is an agent, God cannot be acted upon by anything else. Suppose, finally, that there can be no direct causal connection between these two things: the only way in which they can be causally related is that each is causally acted upon by God. Given these assumptions, we have two things that are directly externally related to one another – they belong to the same system of external relations that are grounded in causal relations – and yet which stand in no direct causal relationship to one another, since it is impossible for either to exert any causal influence on the other.

It is not clear that this is incoherent. Compare, again, inflationary models in which 'universes' are bubbles in a background space. Regions in different bubbles are causally isolated from one another, in the sense that there can be no causal influence of a region in one bubble on a region in another bubble. Moreover, an external relation between the two bubbles can be 'pieced together' from spatio-temporal relations, some of which belong to the manifolds of the bubbles, and some of which belong to the background space. Nonetheless, setting other considerations aside, it seems to remain open that the various spatio-temporal relations that are 'pieced together' in the external relation could each be grounded in some kind of causal relation. On analogy, perhaps the external relation in our previous example can be 'pieced together' from external relations that are grounded in the causal connections between God and each of the things for which an external relationship is required.

Even if it is granted that it is not incoherent to suppose that the fundamental system of external relations consists in, or is grounded in, causal relations, it seems to me to be unattractive to suppose that it is actually the case that the fundamental system of external relations consists in, or is grounded in, causal relations. In the case of the most fundamental system of external relations with which we are acquainted – the spatio-temporal relations of our universe – it is clear that we do not have grounding in causal relations. While this is not an absolutely decisive consideration, it does provide us with some reason to expect that the fundamental system of external relations will not consist in, or be grounded in, causal relations.

If, however, there is a fundamental system of external relations that does not consist in, and that is not grounded in, causal relations, then, I think,

it follows that there cannot be unlocated causal entities. Of course, as I have been at pains to emphasise, the claim here is not that there cannot be causal entities that do not have a location in the space-time in which we are located; rather, the claim is that there cannot be causal entities that do not have a location in the broadest framework of external relations in which our space-time is embedded.

10.3 Mind

If we accept that all causal entities have locations in the broadest framework of external relations in which our space-time is embedded, then we can ask about the locations that we occupy: are we fundamentally located in the space-time of our universe, or do we have a fundamental location somewhere else? (I take it for granted that we are both causal agents and causal patients: we are subject to external causal influence, and we exert external causal influence.)

The materialist – physicalist, naturalist – answer to this question is clear and unambiguous: we are fundamentally located in the space-time of our universe, and we could not possibly continue to exist unless we were thus fundamentally located. On materialist – physicalist, naturalist – conceptions, we are essentially materially – physically, naturally – constituted, and it is impossible for us to exist in the absence of that material – physical, natural – constitution. Moreover, on materialist – physicalist, naturalist – conceptions, it is impossible for things with essentially material – physical, natural – constitutions to exist unless those things have spatio-temporal locations or trajectories in universes broadly like ours.

Some theists are materialists – physicalists, naturalists – but many are not. Theists who are not materialists – physicalists, naturalists – are typically either *substance dualists* or *idealists*.

Idealists insist that, fundamentally, there isn't anything that has an essentially material – physical, natural – constitution, and they further insist that, fundamentally, there is no universe for which spatio-temporal relations form a more or less fundamental frame.

According to idealists, mind is the fundamental constituent of causal reality, and all else is 'constructed from' ideas that have essentially mental 'location'. Some idealists suppose that, fundamentally, there is just one mind – and hence that, if there are further minds, those further minds are also 'constructions from' ideas in that one mind. Other idealists suppose that, fundamentally, there are many minds, and that the mental processes in minds are subject to causal influence by, and exert causal influence

upon, the mental processes in other minds. While idealism is, I think, very much a minority position among theists, there are some theists who hold that, fundamentally, there is just one mind (God), and there are some theists who hold that, fundamentally, there are many minds, and that all minds other than God are created by God.

Idealists who suppose that God is the sole mind may deny that there is a fundamental system of external relations in which God is located. After all, fundamentally, on this view, there isn't anything other than God. However, perhaps these idealists might say that God's relationship to God suffices to define a suitable system of external relations. In any case, there are clearly other formidable difficulties for this view. In particular, if everything else is just ideas in the mind of God, then it isn't true, for example, that God created our universe according to a plan that God had in mind. The vast majority of Abrahamic theists will not accept this consequence of this kind of idealism.

Idealists who suppose that there are many minds, and that all minds other than God are created by God, cannot avoid questions concerning the fundamental system of external relations within which God and the created minds are located. Perhaps these idealists might say that the causal relations between the minds suffice to define a system of external relations within which they are all located. However, even if this were a workable proposal, there are clearly other formidable difficulties for this view. In particular, again, if everything other than minds is fundamentally just ideas in minds, then it simply isn't true that God created a universe according to a plan that God has in mind.[1] True enough, it might be insisted that God puts ideas into the other minds which lead them to believe that God created a universe according to a plan that God had in mind – but, at the very least, the vast majority of Abrahamic theists will not be happy with the suggestion that God engages in such large-scale deception.

While there is doubtless more to say about idealism and its relationship to theism, I do not propose to discuss it further here. Instead, I turn my attention to substance dualism, which is arguably the position that is adopted by the vast majority of Abrahamic theists.

According to substance dualists, there are two elements to our fundamental constitution. On the one hand, we are fundamentally minds – i.e. fundamentally things that do not have an essentially material – physical,

[1] A reader for the publisher asked for more detailed argument at this point. Here is one consideration. Given God's omniscience, all possible worlds are present in full details as ideas in God's mind. But if there is nothing other than ideas in God's mind, then what could 'the creation of the actual world' amount to?

natural – constitution and that do not fundamentally require embedding in a spatio-temporal framework. On the other hand, our minds are *embodied*, and our bodies are fundamentally things that do have an essentially material – physical, natural – constitution and that do fundamentally require embedding in a spatio-temporal framework.

Some theists who are substance dualists suppose that our embodiment is temporary and inessential: we could exist without our bodies in a non-spatio-temporal domain. These theists typically suppose that they will have a future existence in a 'domain' in which there are just many minds and God. As we noted in connection with the related idealist position some paragraphs back, perhaps these substance dualists might say that causal relations between the minds then suffice to define the framework of external relations that characterises this 'domain'. However, even if this is a workable proposal, there are other difficulties to face. In particular, it is very unclear what causal interaction between the minds other than God would be like. While we are embodied, our bodies play an essential role in the causal commerce between us, including in the communication of thoughts, emotions and so forth. But can we so much as conceive of communication between unembodied minds that does not do utter violence to our conception of the essential separation and distinctness of our minds? Perhaps some theists might respond to this apparent difficulty by denying that there will be communication between the many minds in that future state: perhaps, instead, there will only be one–one relationships between God and the other minds. But it is not clear that this response meets the fundamental difficulty: for it seems no more secure to suppose that we can conceive of communication between unembodied minds and God that does not do utter violence to our conception of the essential separation and distinctness of our minds.

Other theists who are substance dualists suppose that our embodiment is permanent and essential: we cannot exist without bodies, and we cannot exist in a non-spatio-temporal domain. Among these theists, there is division about the prospects for, and the nature of, life after death. Some of these theists suppose that there will be life after death within the bounds of the universe that we currently inhabit, with something much like the current form of embodiment. Others among these theists suppose that there will be life after death in some other domain in which there is some other form of embodiment. And yet others among these theists suppose that there will not be any life after death.

Those theists who are substance dualists and who suppose that there will be life after death within the bounds of the universe that we currently

inhabit, with something much like the current form of embodiment, face the difficulty that our current physical theories tell us that our universe will not be inhabitable by creatures with our kind of embodiment – or any other kind of embodiment – in the far distant future. According to current physical theory, when the universe is much older, it will be much bigger, much colder and much more empty, and it will contain more or less nothing except for the occasional blip of radiation. So, on the data that we have, this looks like a dead end.

Those theists who are substance dualists and who suppose that there will be life after death in some other domain in which there is some other form of embodiment do not have to face the difficulties raised by current physical theory. However, if these theists suppose that the domain in question will be inhabited by God as well as by re-embodied creatures, then we face questions about the nature of the fundamental external relations that characterise that domain. If these relations are more or less spatio-temporal, then it will turn out, after all, that God has something very much like a spatio-temporal location or trajectory – just not in the universe in which we are currently embodied. On the other hand, if these relations are not more or less spatio-temporal, then it is not at all clear that we can form any clear conception of what 'embodiment' for us would then consist in. Either way, it seems that there are uncomfortable consequences.

Those theists – perhaps few in number – who are substance dualists and who do not suppose that there will be some kind of life after death face the same kinds of questions that also confront those theists who suppose that we have an essentially material constitution and who do not suppose that there will be some kind of life after death. These will not be the kinds of questions that we have been considering in the past few paragraphs.

10.4 Action

If we accept that all causal entities have locations in the broadest framework of external relations in which our space-time is embedded, then we can ask about the locations upon which agents are able to act: are agents only able to act upon sub-parts of the broadest framework of external relations within which they are located, or can agents act upon sub-parts of the broadest framework of external relations in which they have no location?

If an agent is located within a sub-part of the broadest framework of external relations upon which there is a defined metric, then we can ask whether that agent is only able to act directly upon the most immediate

neighbourhood within which that agent is located, or whether that agent is able to act directly upon more remote locations. Moreover, if an agent is located within a sub-part of the broadest framework of external relations upon which there is a defined metric, then we can ask whether any action that that agent undertakes has to be mediated by 'contact', or whether that agent can 'act at a distance'.

Even if there is no metric defined upon the broadest framework of external relations, there is certainly a metric defined within our 'bubble', and there are corresponding metrics defined in other 'bubbles', and in the background space-time, if there is a background space-time that contains other 'bubbles'. Given that there is a background space-time that contains other 'bubbles', the 'bubbles' provide some partition of the overall framework into parts that are causally isolated in the following sense: an agent in one 'bubble' is unable to act directly upon things in other 'bubbles'. *This* gives the sense that I wish to attach to the question that I posed at the beginning of this section: if the broadest framework of external relations contains parts that are analogous to the just-mentioned 'bubbles', are agents only able to act upon the sub-parts within which they are located, or can agents act on sub-parts within which they have no location?

Our own experience of agency is one that involves no action at a distance. We can only act directly upon things that we can pick up, kick, yell at and so forth; and we can only be acted upon directly by things that can pick us up, kick us, yell at us and so forth. Moreover, this absence of action at a distance goes pretty deep: as far as we know, there is no action at a distance anywhere in our universe. In quantum field theory, all field interactions are mediated by particles; and there isn't anywhere else to look for action at a distance.[2]

So say materialists. But, of course, substance dualists – and, in particular, theist substance dualists – beg to differ. Given that there is no metric defined upon the broadest framework of external relations, it is strictly true that there is no action at a distance in our universe. But, according to substance dualists, there is plenty of action upon our universe by agents that are not located in our universe. On the one hand, our minds act upon our universe even though our minds are located elsewhere in the broadest framework of external relations; and, on the other hand, God acts upon our universe even though God is located elsewhere in the broadest framework of external relations.

[2] A reader for the publisher asks: 'What about the "spooky action at a distance" exhibited in quantum entanglement?' I reply: this is not *action* at a distance; there is no *action* in quantum entanglement.

Substance dualists sometimes say that it is given in our experience that our minds act upon the universe even though our minds have no location within it. So, for example, substance dualists sometimes say that it is given in the experience of moving one's arm directly by willing to do so, that one acts upon the universe from no location within the universe. This just seems wrong to me. True enough, it may not be given in the experience that one acts from such-and-such a location when one moves one's arm directly by willing to do so; but it does not follow from this that it is given in the experience that there is no location from which one acts when one moves one's arm directly by willing to do so. In particular, if – as many materialists suppose – all of our mental states are just physical states, and all of our mental processes are just physical processes, then the process of my willing to move my arm just is the cause of the movement of my arm, and there is a spatio-temporally continuous process that connects my mental processing with the movement of my arm.

Even if it is accepted that there is no straightforward argument from my experience of moving my arm to the conclusion that our minds act upon the universe even though our minds have no location within it, there are other considerations about experience that might be thought to support the same conclusion. Perhaps one might think that standard arguments against the materialist identification of mental states with physical states – for example Jackson's knowledge argument and Chalmers' zombie argument – establish that our minds have no location in our universe (and that no serious argument is needed to establish that our minds act upon our universe). But this is also too quick. Even if the arguments of Jackson and Chalmers did establish that our mental states are not purely physical states, it does not follow that those mental states (and our minds more broadly) fail to have location in our universe. At most, the arguments of Jackson and Chalmers establish that some mental properties are at least as fundamental as – hence, not reducible to, and not supervenient upon – physical properties; but this tells us nothing about what it is that bears these properties. For all that these kinds of arguments can show, our minds are located in our heads, and not somewhere beyond the confines of our universe.

Even if it is accepted that standard arguments against the materialist identification of mental states with physical states fail to show that our minds are located somewhere beyond the confines of our universe, it might be suggested that there are further considerations that establish the desired conclusion. In particular, there are reports of anomalous experiences – out-of-body experiences, near-death experiences and the like – which are

sometimes claimed to support the conclusion that our minds are located somewhere beyond the confines of our universe. But those reports cannot bear the argumentative weight. For, even if taken at face value, reports of out-of-body experiences are always reports of experiences as from particular perspectives within our universe; and, in any case, there are overwhelmingly good reasons not to take any of these reports at face value (both because of the reported circumstances in which the experiences occur and because of the unreliable nature of the reports themselves).

The overwhelming majority of people have nothing like out-of-body experiences or near-death experiences; the overwhelming majority of people have nothing but standardly embodied experiences of our universe. This data is perfectly explained if our minds are located with our bodies – and, in particular, if our minds just are parts of our bodies – but is much harder to explain if our minds are located somewhere beyond the confines of our universe. Given the weakness of the considerations that can be advanced in favour of the claim that our minds are located somewhere beyond the confines of our universe, there is, at least, a pretty strong *prima facie* case that our minds are not located somewhere beyond the confines of our universe, and, in particular, there is a pretty strong *prima facie* case that our minds only act where they are located.

Even if it is accepted that our minds only act where they are located, it might be insisted that *God* can act in parts of the broadest framework of external relations in which God has no location. However, before we turn to a closer examination of the question whether God can act in our universe, given that God does not have a location within our universe, we shall need to think a bit more about the nature of causation.

10.5 Causation

As noted in Schaffer (2007), there is a host of philosophical questions about causation. On the one hand, there are questions about the nature of causal relata: Are they located entities? If not, how fine grained are they? How many relata are there? On the other hand, there are metaphysical questions about the causal relation: What connects causes with their effects? What explains causal direction? What distinguishes between causes and causal conditions? Here, I wish only to take up questions about the connection between causes and effects.

Still following Schaffer (2007), we may divide views about the connection between causes and effects into four kinds. First, there are *probabilistic* views: views which say that causes make their effects more likely. Second,

there are *process* views: views which say that causes physically produce their effects. Third, there is *primitivism*: the view which says that the relation between cause and effect is conceptually primitive. Fourth, there is *eliminativism*: the view which says that there is no coherent conception of the connection between cause and effect. Examples of probabilistic views include the view that causation is *nomological subsumption*, the view that causation is *statistical correlation*, the view that causation is *counterfactual dependence* and the view that causation is *agential manipulability*. Examples of process views include the view that causation is *contiguous change*, the view that causation is *energy flow*, the view that causation is *physical process* and the view that causation is *property transference*. There are hybrid views which are both probabilistic and process: for example, views which say that causes make the physical production of their effects more likely.

Given the difficulties that confront all analyses involving probability and process (and hybridisations thereof), and given the central role that causation plays in the characterisation of theism, it might seem that primitivism is warranted. However, even if primitivism is warranted – and hence there is no satisfactory analysis of causation in terms of probability and/or process – it is worth noting that there is considerable intuitive support for the thought that actual causation centrally involves both probability and process. Much actual causation involves probability increase; much actual causation involves physical process. When we are asked to describe paradigm cases of causation, we turn to examples that involve probability increase and physical process: kicking footballs, observing collisions of billiard balls, analysing correlational data about smoking and lung cancer and so forth. And when we acquire the concept of causation, our stereotypes are these same kinds of examples.

On any account of causation, there is a question whether our universe is *causally closed*. Are there causal chains that originate within our universe but terminate outside it? Are there causal chains that originate outside our universe but terminate within it? Are there causal chains that both originate and terminate outside our universe but that are partly located within it? If our universe is a 'bubble' in a background space-time, then it seems plausible to suppose that there are causal chains that originate outside our universe but that terminate within it. However, at least on standard materialist views, there are no causal chains that pass from within our universe to outside our universe, and there are no causal chains from outside our universe that terminate within it that do not pass through the process of 'bubble'-formation form which our universe originated. Thus,

on standard materialist views, our universe is causally closed except for its initial point or initial surface. Moreover – and relatedly – on standard materialist views, there is no exchange of conserved quantities between our universe and the background space in which it is located: quantities like mass energy, and charge, and spin, and so forth can only vary within regions of our universe by causal exchange with other regions within our universe.

If our universe is causally closed, and if there is no exchange of conserved quantities between our universe and the background space within which it is located, then there is no way that we can act on other parts of the background space within which our universe is located. Moreover, given that any action of ours is causal, and given that the kind of causing that we do when we act involves something like transfer of conserved quantities, there is no way that we can act on some other part of the domain defined by the broadest framework of external relations within which our universe is located, at least given that we remain located in our universe.

Given the already noted difficulties involved in the supposition that we might be transported to some other location in the domain defined by the broadest framework of external relations within which our universe is located, it seems that considerations about causation simply reinforce our previous conclusion that our minds act only in our universe, and that our minds will never act anywhere else. However, even if it were accepted that this is how matters stand for us, it would still be a further question how matters would stand for God.

10.6 Divine action

If our universe is a 'bubble' in a background space-time, then theists will typically wish to say that God is the sole cause of the initial existence of that background space-time and that God is an essential ('supporting' or 'conserving') cause of the continued existence of that background space-time and all that it contains. Moreover, theists will also typically wish to say that God has a further causal role in some of the things that are to be found within our 'bubble': not only is God ultimately responsible for the initial and continued existence of this 'bubble' and all that it contains, God is also the (principal) direct cause of some of the things that are to be found within our 'bubble'.

One question that arises immediately is whether we should suppose that it is possible for God to act at particular locations in our 'bubble' given

that God is not located within our 'bubble', or for God to act at particular locations in the background space-time given that God is not located within that background space-time. We have already seen that there are various reasons why one might deny that agents who are located in particular sub-parts of the domain defined by the broadest framework of external relations can act on locations in other non-overlapping sub-parts of the domain defined by the broadest framework of external relations. Among other things, we might suppose: (1) that the various sub-parts of the domain defined by the broadest framework of external relations are *causally closed* to one another except at points of origin; and/or (2) that the various sub-parts of the domain defined by the broadest framework of external relations are causally closed to one another except at points of origin because causation requires *exchange of conserved quantities* and yet there can be no exchange of conserved quantities across the various sub-parts of the domain defined by the broadest framework of external relations; and/or (3) that an agent can only act within a particular sub-part of the domain defined by the broadest framework of external relations if the agent is *embodied* within that particular sub-part of the domain defined by the broadest framework of external relations, and, moreover, that the acts of will of an agent directed towards a particular sub-part of the domain defined by the broadest framework of external relations can only be *effective* if the agent is embodied within that particular sub-part of the domain defined by the broadest framework of external relations; and/or (4) that an agent can only *identify* locations within a particular sub-part of the domain defined by the broadest framework of external relations if that agent is located within that particular sub-part of the domain defined by the broadest framework of external relations; and/or (5) that an agent – and, in particular, the mind of an agent – must be characterisable in terms of the possession of conserved quantities: minds must have constitutions that enable them to bear the kinds of properties that are exchanged in causal interactions if they are to be the minds of agents; etc.

If one takes these kinds of considerations seriously, then, I think, one will take the view that the most that can be indicated is some kind of deism. On the most minimal view, God would be the initial cause of the existence of the background space-time within which our 'bubble' is located, and would have no further involvement with, or knowledge of, the evolution of that background space-time. Some deists might further insist that God exercises some kind of conserving power in order to maintain the existence of the background space-time and all that it contains – but that hypothesis seems inelegant when set against the hypothesis that

the background space-time is in no further need of divine assistance once it has been brought into existence.

Even if one does not take these kinds of considerations seriously – even if, for example, one supposes that all of these concerns can be written off as 'clash of intuitions' or 'clash of world views' – there may be other considerations about particular divine actions in the world that present more of a challenge.

Suppose we grant that God is both creator and sustainer of all of the rest of the causal order: nothing else exists or happens except as a downstream causal consequence of both God's initial creative act and God's subsequent conservative efforts. Suppose, further, that we grant that God's initial creative act happens according to a plan for the unfolding of the rest of the causal order that it brought into existence by that initial creative act. There are various hypotheses that we might frame about this divine plan.

Some theists suppose that the divine plan is complete in every detail: given the initial creative act and the accompanying conservative efforts, there is just one way that the causal order can unfold. On this supposition, it seems that there is no room for the further supposition that, along with the initial creative act and the accompanying conservative efforts, there are *also* local acts or interventions that God makes within the rest of the causal order. If God initially chooses one way that the rest of the causal order can unfold and says 'Let it be!', then – given that God is both omnipotent and omniscient – that *already* establishes God's complete causal responsibility for everything that happens in the rest of the causal order.

Some theists suppose that the divine plan is chancy, in the following sense: given the initial creative act and the accompanying conservative efforts, the ways that the rest of the causal order can unfold form a tree-like structure, and which branch of the tree turns out to be the actual remaining causal order turns entirely on how the chances play out. On this supposition too, it seems, there is no room for the further supposition that, along with the initial creative act and the accompanying conservative efforts, there are *also* local acts or interventions that God makes within the rest of the causal order. If God initially chooses the 'tree' of ways that the rest of the causal order can unfold, and says, in effect 'Let chance determine which one of these shall be,' then – given that God is both omnipotent and omniscient – that *already* establishes the full extent of God's causal responsibility for what happens in the rest of the causal order.

Some theists may suppose that there is some third alternative: that is, some theists may suppose that there is a divine plan, but it is neither complete nor chancy (in the senses that I have specified). However, given that God is both omnipotent and omniscient, there is no such third alternative. I conclude that the set of local acts or interventions that God makes within the rest of the causal order, distinct from God's initial creative act and accompanying conservative efforts, is necessarily empty: there can be no such acts or interventions.

I do anticipate *some* resistance to this conclusion. In particular those theists who think both that God performs miracles and that miracles are particular divine interventions in the rest of the causal order will insist that there must be something wrong with this argument. Perhaps, however, those theists might be persuaded to adopt the traditional view that miracles are merely particular types of signs that carry certain sorts of divine messages, at least for those who are able to read them.

Some theists might suppose that we can appeal to a distinction between primary and secondary causes in order to resist my conclusion. On this line of thought, while God is required to actively 'concur' in every case of causation, God has also empowered creatures to act independently, according to their potentialities, in obedience to natural law. Aquinas (*SCG* III, 70) says:

> The same effect is not attributed to a natural cause and to divine power in such a way that it is partly done by God and partly by the natural agent; rather, it is wholly done by both, according to a different way, just as the whole effect is wholly attributed to the instrument and also wholly to the principal agent.

I do not think that Aquinas can be right about the case of an instrument and a primary agent. Suppose that I hit a golf ball with a seven iron. In this case, I am the principal agent, the seven iron is the instrument and the motion of the golf ball is the effect. The cause of the motion of the golf ball is something like my bringing the seven iron into forceful contact with it. Thus, the motion of the ball is partly attributable to me, and partly attributable to the seven iron: the seven iron and I act in concert to bring about the motion of the golf ball.

Not only do I think that Aquinas wrong about the particular case, I also think – on similar grounds – that he is wrong about the application to the divine case. On Aquinas' view, the example just given is incomplete: when I hit the golf ball with the seven iron, I do so with God's concurrence. On Aquinas' view, then, the cause of the motion of the golf ball is something

like my bringing the seven iron into forceful contact with the ball with God's concurrence. If we take away the seven iron, and I do not swing with something else in its stead, then the ball is not moved by my swinging (even given that God would have otherwise concurred). If I do not swing the seven iron, and no one else swings in my stead, then the ball is not moved by the seven iron (even given that God would have otherwise concurred). If God does not concur with my swinging of the seven iron to hit the ball, then – on Aquinas' view – the ball does not move. So, after all, on Aquinas' assumptions, the motion of the ball is partly attributable to God, partly to me and partly to the seven iron: God, the seven iron and I act in concert to bring about the motion of the golf ball.[3]

The upshot here, I think, is that it cannot be that God *both* empowers creatures to act independently, according to their potentialities, in obedience to natural law *and also* is wholly responsible for every case of causation. If God is wholly responsible for every case of causation, then there is a complete divine plan; and if God empowers creatures to act *independently*, according to their potentialities, in obedience to natural law, then there is a chancy divine plan. No third alternative is established by appeal to the distinction between primary and secondary causation.

There is a considerable recent literature on openings for 'special divine action' afforded by quantum mechanics, or chaos theory, or whole/part constraints (see, for example, Saunders (2002)). If I am right, the kinds of speculations that populate this literature are all misconceived: for these speculations depend upon the assumption that completeness and chance do not exhaust the possibilities for divine planning. Of course, it

[3] A reader for the publisher objects: 'Thomists deny that God is another cause in the created manifold because he is not located in space-time. His action is – in some mysterious way that I cannot really fathom – a necessary condition of any creaturely action, though not a cause.' I accept that God is not 'a cause in the created manifold', because God is not *located* in the created manifold. But, equally, when I hit the golf ball, I am not an 'instrumental' cause of the motion of the golf ball: I do not use myself as an instrument in order to get the ball to move. Nonetheless, it is plainly true that *my bringing the seven iron into forceful contact with the ball* causes the ball to move; and so plainly true that both I and the seven iron are 'components' or 'parts' of the total cause of the motion of the ball. (Of course, according to context, it may be perfectly acceptable to say that *contact with the seven iron* caused the ball to move, and perfectly acceptable to say that *my swinging the seven iron* caused the ball to move; but that there are contexts in which it is appropriate to say these things does not suffice to establish that the motion of the golf ball is 'wholly caused' by the club, and, in a different way, 'wholly caused' by me. In particular, given that there are yet other contexts in which it is perfectly acceptable to say that *my bringing the seven iron into forceful contact with the ball* causes the ball to move, to proceed in that fashion would also have us saying that the motion of the golf ball is, in yet another way, 'wholly caused' by me and the club.) Since, on the Thomist view, it is plainly true *that my bringing the seven iron into forceful contact with the ball with divine concurrence* causes the ball to move, I say that Thomists ought to accept that God, I and the seven iron are all 'components' or 'parts' of the total cause of the motion of the ball.

is plausible to suppose that quantum mechanics, and chaos theory, and whole/part constraints would figure in any divine plan: but they would all be fully there from the initial point of implementation of the plan.

10.7 Concluding remark

There are many interesting questions to be raised in connection with divine location, divine mentality, general divine action, divine causation and special divine action. Some authors – for example Rundle (2004) and Fales (2010) – push harder than I have for the conclusion that there is something seriously problematic about the very notion of divine action. I am satisfied to observe that there is plenty of room for further investigation in this area.[4]

[4] A reader for the publisher wonders why I ignore pantheism and panentheism in this chapter. Short answer: because this book is about *theism* and I have insisted – though perhaps simply as a matter of stipulation – that theism postulates a *separate and distinct* creator of a created order. Pantheism and panentheism are thus topics for some other occasion.

CHAPTER 11

Value

As noted in section 1.4, there are various *fundamentally evaluative* properties that are commonly attributed to God: goodness, beauty, worthiness of worship and the like. To say that God possesses one of these properties is primarily to make an approving value judgement about God.

Of course, there are many other properties that are commonly attributed to God that involve approving value judgements: consider, for example, benevolence, providence, sympathy, rationality, wisdom, justice, authority, jealousy, anger and so forth. Some of these further properties are evaluative only insofar as they are grounded in the fundamental evaluative properties: it seems not implausible to suppose, for example, that God's benevolence, providence and sympathy are all grounded in God's goodness. Some of these further properties are also grounded in fundamental properties other than fundamental evaluative properties: it seems not implausible to suppose, for example, that God's rationality and authority – and perhaps even God's justice – are not merely grounded in God's goodness, but also in God's power.

Even if this rough taxonomy turns out to be superficial, or misguided, that will not matter for the discussion that is to follow. I propose here to take up an examination of just a small selection from the fundamental evaluative properties that are commonly attributed to God. We begin with goodness.

11.1 Goodness

It is plausible that a theory of the good is also a theory of the bad and the indifferent: goodness, badness and indifference are conceptually linked, and it is plausibly a mistake to ignore those conceptual connections when discussing any one of them. If we let 'V' stand indifferently for 'good', 'bad' and 'neither good nor bad', then – following Schroeder (2012) – we can distinguish between the following four kinds of constructions that can be used in talking about the good, the bad and the indifferent:

(1) 'x is V', where 'x' is a (possibly compound) term
(2) 'It is V that p', where 'p' is an indicative sentence
(3) 'x is V for y', where 'x' and 'y' are (possibly compound) terms
(4) 'x is a V y', where 'x' and 'y' are (possibly compound) terms.

(There are variations on 3 in which other prepositions – 'as', 'by', 'from', 'to', 'if' – replace 'for', and where the term 'y' may be replaced by some other kind of linguistic construction.)

It is plausible that talk about the good is conceptually dependent upon talk about the better, and that talk about the bad is conceptually dependent upon talk about the worse. If we let 'R' stand indifferently for '… is better than …' or '… is worse than …', then we can distinguish between the following four kinds of constructions that can be used in talking about the better and the worse:

(1) 'x R y', where 'x' and 'y' are (possibly compound) terms
(2) 'that p R that q', where 'p' and 'q' are indicative sentences
(3) 'x R y for z', where 'x', 'y' and 'z' are compound terms
(4) 'x R y, qua w'.

(As before, there are variations on 3 in which other prepositions replace 'for'.)

It is possible that there is typically an implicit reference to purposes, or ends, or aims, in talk about the better and the worse:

(1) 'x R y for z'
(2) 'that p R that q for z'
(3) 'x R y, qua w, for z'.

(Here, the previous 1 and 3 collapse, and there are variations on 1 in which other prepositions replace 'for'.)

It is also possible that there is typically a contextually supplied comparison class in talk about the good, the bad and the indifferent:

(1) 'x R *these Ks* for y'
(2) 'that p R *these that q's* for y'
(3) 'x R *these Ks*, qua w, for y'.

We can find instances of all of these constructions involving God and goodness: 'God is good'; 'It is good that God made our universe'; 'God is good to all'; 'God is a good guide to life'; 'God is better than Satan'; 'That God allows some to perish is better than that God allows some to suffer for all eternity'; 'God is better than Satan as a guide to life'; 'God is

a better god than Jove'; 'God is better than Baal for those who seek'; 'That God allows some to perish is better than that God allows some to suffer for all eternity for those who do not obey God's commands'; 'God is a better guide to life than Satan for those seeking true happiness'; etc.

While a complete account would trace out the connections between these different kinds of claims, our interest is primarily in the claim that God is good. We leave discussion of connections between the claim that God is good, and other kinds of claims involving goodness and God – for example that God is *good for* certain kinds of things or certain kinds of purposes, or that it is *good that* God has certain kinds of properties and performs certain kinds of actions, or that God is *a good instance* of particular kinds – for some other occasion.

11.2 Divine goodness

On its face, the sentence 'God is good' appears to involve attribution of a property – goodness – to God. Some philosophers have supposed that, appearances notwithstanding, it is wrong to take sentences of the form 'x is good' to be properly used to make property attributions. These philosophers say, instead, that the proper use of sentences of this form is merely to make expressions of approval (or some other kind of pro-attitude, or some other more general kind of attitude): on the simplest version of this kind of view, one might as well have said 'Hooray for God!' – and, of course, there is no reason to suppose that, in saying 'Hooray for God!', one is making any kind of property attribution. Ignoring the large, subtle and complex contemporary examination of expressivist positions – and, in particular, skipping over any questions about what properties might be – I shall simply assume, for the purposes of the subsequent discussion, that there is a fairly robust sense in which the sentence 'God is good' can be taken to be a property attribution. If this sentence can be truly asserted, then there is some property of goodness that is possessed by God.

We suppose, then, that God is good. Two questions immediately arise. First, why is God good? What is it about God that makes God good? Is there something else – either something else about God, or something other than God – in virtue of which God is good? Second, how is God's goodness related to the goodness of things other than God? When other things are good, why are they good? What is it about other things that makes them good, when they are good? Is the goodness of other things somehow related to the goodness of God, or is the goodness of other things independent of the goodness of God?

I think that the preferred answer to the first question is that goodness is a *fundamental* property of God. God is not good in virtue of God's possession of some property other than goodness; and nor is God good in virtue of God's relationship to things other than God. God was good – indeed, perfectly good – prior to creation; and, at that point, there wasn't anything else that could have played the role of being that in virtue of which God was good.

Perhaps some might be tempted to suggest that God's goodness is grounded in God's perfection: God is good because God is perfect. However, it seems to me that this gets things exactly the wrong way around: God's being perfect depends upon – and, indeed, is constituted by – God's being perfectly good, and perfectly powerful, and perfectly knowledgeable, and so on, for all of God's other perfections. Perhaps it might be observed that, while God's perfection entails God's perfect goodness, God's perfect goodness does not entail God's perfection. However, even without pausing to examine these claims about entailment, we can observe that entailment is one thing and (metaphysical) dependence quite another: a bunch of x's can constitute y even though the existence of any subset of the x's does not entail the existence of y.

Perhaps some might be tempted to suggest that the claim that goodness is a fundamental property of God is in tension with the doctrine of divine simplicity. But, even if we suppose that God's perfect goodness is identical with God's perfect power – and that God's perfect power is identical with God's perfect knowledge, and so on for all of God's perfections – it will still be the case that God's goodness is fundamental: it will not be the case that God is good in virtue of something else. And this remains so even if God's goodness is also identical to God's existence.

Perhaps some might be tempted to suggest that goodness is not a fundamental property of God because goodness – like all evaluative properties – is posterior to certain kinds of deontic or normative properties. If, for example, we suppose that what makes something good is that it is correctly or appropriately desired, then we might suppose that God's goodness is grounded in God's being correctly or appropriately desired. Against this, it is tempting to claim that we again have an inversion of the proper order of explanation: it is the goodness of things that makes them correctly or appropriately desired. But, in any case, it seems unlikely that theists will wish to apply this 'fitting attitude' analysis of goodness to God: for, prior to creation, the only thing that is available to have the correct or appropriate desires is God. Yet it is surely wrong – if not downright improper – to suppose that God's goodness is then somehow constituted

by the appropriateness or correctness of God's desire for God or by the appropriateness or correctness of God's desire for God were God to have such desires.

Suppose we accept that goodness is a fundamental property of God – i.e. suppose we accept that God's goodness is not grounded in something else about God or in something other than God. Should we suppose that God is unique in this respect – i.e. should we suppose that God is the only thing for which goodness is a fundamental property – or should we rather suppose that there are other things for which it is true that their goodness is not grounded in something else?

Some theists might think to propose that, while God's goodness is not grounded in anything else, the goodness of all other things is grounded in God. Of course, the claim here is not just that, without God's causal activity, no other things would *be* good. By the lights of at least most theists, since God is the ultimate cause of the existence of everything else that exists, it is an easy consequence that God is the ultimate cause of the existence of whatever other good things there are; and hence it is an easy consequence that the presence of goodness in the universe is dependent upon God's creative activities. The claim here is rather that God's goodness plays a constitutive role in the goodness of whatever other good things there are: God's goodness is an essential element in the explanation of what makes those other things good.

It is, I think, hard to resist the idea that there are things other than God for which goodness is a fundamental property. In particular, for example, it has seemed to many people that pleasure is fundamentally good: there is nothing *further* in which the goodness of pleasure is grounded. Moreover, once we have this example in hand, there are many other things that at least some people have wished to add to the list of things that are fundamentally good: there is also nothing further in which, for example, the goodness of happiness or friendship is grounded. True enough, some people wish to reduce the goodness of happiness and friendship to the goodness of pleasure; but, whether or not one approves of this reduction, it seems that one is required to concede that there are some things other than God for which goodness is a fundamental property.

The conclusion of the preceding paragraph might be reinforced by other kinds of considerations. In particular, it is worth observing that goodness, badness and indifference appear to be both conceptually and metaphysically connected. Goodness, badness and indifference are all elements on a single scale. If we suppose that there is nothing other than God for which goodness is a fundamental property, then there is at least some reason to

suppose that we will be driven to claim that there is nothing other than God for which badness or indifference is a fundamental property. But, even if one could – somehow – ground the goodness of pleasure, happiness and friendship in God's goodness, it seems quite a stretch to ground the badness of pain, unhappiness and enmity, and the indifference of the absence of both pleasure and pain, or happiness and unhappiness, or friendship and enmity, in God's goodness.

Some theists have claimed that the goodness of all other things is grounded in God's *approval*: something other than God is good just in case God approves of it; and something other than God is bad just in case God disapproves of it; and something other than God is indifferent just in case God neither approves nor disapproves of it. Given that God is perfectly good – and given that God's goodness is fundamental – it seems clearly right to say that God's approving correlates perfectly with goodness, and God's disapproving correlates perfectly with badness, and God's neither approving not disapproving correlates perfectly with indifference. However, what would seem to follow from God's being perfectly good is merely that God will approve of exactly those things that *are* good, and God will disapprove of exactly those things that *are* bad, and God will neither approve nor disapprove of those things that *are* indifferent. The question still remains: Can the goodness of things be *constituted by* the approval of something that is perfectly good? And, if so, in virtue of what does the approval of such a being ground the possession of goodness by those other things?

If a perfectly good being approves of certain things, this will be because it has – and because there is – *reason* to approve of those things. In the nature of the case, it is hard to see what such a reason could be, unless it is the fact that those things are good (or something else that suffices to ground the fact that those things are good). But, if that is right, then it seems that the mere approval of something that is perfectly good is insufficient to constitute the goodness of other things: what really gets to the heart of the constitution of the goodness of those other things is the reason that the perfectly good thing has to approve of them. And, if that is right, then it is not true that the goodness of other things is grounded in God's approval of them.

Some theists have claimed that the goodness of all other things is grounded in their *measurement* against God: roughly speaking, things are better insofar as they approximate more closely to God. On the crudest version of this account, the goodness of other things would be thought of as some percentage of the goodness of God. However, setting all other

considerations aside – and, in particular, ignoring worries about anthropomorphism and the otherness of God – the same kind of question arises as in the preceding case. Given that God is perfectly good – and given that God's goodness is fundamental to God – it seems clearly right to say that measurement against God's goodness correlates perfectly with goodness. But what does all of the heavy lifting here is the idea that there is a scale of goodness to which God is fitted at the upper limit: ultimately, on this account, God functions merely as an instrument to facilitate readings on that scale.

Wittgenstein (1958: 50) says: 'There is one thing of which one can say neither that it is one metre long, nor that it is not one metre long, and that is the standard metre in Paris.' This is surely wrong. The standard metre in Paris is one metre long. But we do not determine that it is one metre long by measuring it against itself (whereas, at least in theory, we determine the lengths of all other things by measuring them against it). Rather, we stipulate that the standard metre in Paris is one metre long, at least at specified temperature, pressure and so forth. Or, at least, that is what we once did. We now have a different determination of the standard metre: very roughly, the distance that light travels in a vacuum in 3×10^{-9} seconds. But, to the limits of our capacity to measure, the standard metre in Paris is one metre long (at specified temperature, pressure and so forth), and so, at least in principle, we could still determine the lengths of all other things by measuring them against it.

The history of the standard metre exhibits all of the relevant options for measuring devices. On the one hand, a measuring device can be arbitrarily chosen: we just stipulate that the measuring device is our standard. On the other hand, we can have some independent standard (which may itself be arbitrarily chosen), but make it the case that our measuring device conforms to that independent standard. If we take the first option, then it is merely a matter of arbitrary decision that our measurement device has the particular measure that it does. If we take the second option, then there is some independent standard to which our measuring device conforms. And there is no third option. So it just is not true that the goodness of other things is grounded in their measurement against God.

Even if it is accepted that it cannot be that the goodness of other things is grounded in the goodness of God, it might be wondered whether other related evaluative or normative properties can be grounded in the goodness of God, or in other evaluative or normative properties of God, or in the states or actions of God. In particular, it might be wondered whether such things as rights and obligations, or permissions and requirements,

can be grounded in God. Many theists suppose, for example, that divine commands or divine acts of will can ground obligations for creatures. On this view, what makes certain actions obligatory for me is that God has commanded me to do them, or that God has (antecedently) willed that I should do them.

In order to set certain kinds of questions to one side, I shall here consider only the question whether we *could have* obligations grounded in divine commands or divine acts of will *given that* divine commands or divine acts of will could be communicated to us in ways that would meet whatever requirements would have to be met in order for divine commands or divine acts of will to ground obligations for us.

It is clear that authorities can issue 'arbitrary' commands that nonetheless create obligations for those who are subject to those authorities. The legislature of a particular country may command citizens to drive on the left; and, if they do so, then – absent any defeating conditions – citizens have an obligation to drive on the left. In this kind of case, while the content of the command is arbitrary – there is, we shall suppose, no fundamental consideration that favours driving on the left above driving on the right, or vice versa – it is not arbitrary that some command or other is issued. If there are cases like this – where some arbitrary decision is required – then divine commandment, or perhaps even divine willing, might be sufficient to ground particular obligations for those who are subject to those commands or acts of will.

Suppose we set aside this special class of cases in which the content or obligation is arbitrary. In all of the remaining cases, the content of issued commands or acts of will is based in reasons: God has a reason for giving the command, or willing, with the particular content in question. In those cases, it is not the mere giving of the command or the mere act of willing – not even the mere giving of the command by God or the mere act of willing by God – that grounds the obligation to obey; rather, the obligation to obey is grounded in the reasons that God has for issuing the command, or willing, with the particular content in question.

Suppose, for example, that God commands, or wills, us not to kill innocent children. Moreover, let us suppose, God issues this command because the killing of innocent children is bad – i.e. the reason that God issues a command with this particular content is that it is bad to kill innocent children. In that case, while it is true that we have an obligation not to kill innocent children, the obligation is grounded in the badness of the killing of innocent children and not in God's issuing of the command. The primary reason that we have not to kill innocent children is that it

is bad to kill innocent children (that being the reason that God had to command us not to kill innocent children); our obligation to comply with God's commands – if there is such an obligation – is merely a fifth wheel to the coach.

Perhaps it might be objected that, in those cases where we are unable to discern God's reasons for issuing a command, or for willing, with some particular content, the issuing of the command is hardly a fifth wheel to the coach: for we would not know what we are obliged to do were it not for the issued command. But this objection is beside the point. The question that I have been pursuing is metaphysical or ontological, not epistemological. What I wanted to know about is the grounding of obligations: what, for example, is the ultimate reason why we should act in such-and-such a manner? If God has commanded us to act in a certain way, then we have an obligation to act in that way; but the ultimate ground of our obligation to act in that way is not God's issuing of the command, but rather the ultimate reasons that lead God to issue a command with that particular content. If God's ultimate reason for commanding us not to kill innocent children is that killing innocent children is bad, then the fundamental ground of our obligation not to kill innocent children is that killing innocent children is bad (and this is so even if we do not understand that killing innocent children is bad, and take ourselves to have an obligation not to kill innocent children only because God has commanded us not to do that).

In short, then: there is at best a very limited range of cases in which our obligations could be grounded in divine commands or divine acts of will. It is not just that the goodness of other things cannot be grounded in the goodness of God; except for a limited range of cases, evaluative and normative properties cannot be grounded in the goodness of God, or in other evaluative or normative properties of God, or in the states or actions of God.

11.3 Beauty

It is plausible that a theory of the beautiful is also a theory of the ugly and the indifferent, i.e. that which is neither beautiful nor ugly. Moreover, it is also plausible that we can discriminate similar kinds of constructions that can be used in talking about the beautiful, the ugly and the indifferent to those that we identified in connection with talk about the good, the bad and the indifferent. Consider, for example: 'God is beautiful', 'God is beautiful to anyone with eyes to see', 'God is a beautiful friend', 'God is

more beautiful than Satan', 'God is more beautiful than Horus to anyone with eyes to see', 'God is a more beautiful friend than Jove', and so on.

Following Sartwell (2012), we observe that there are a number of different conceptions of beauty that have found favour in Western thought and which have echoes in contemporary theorising. *Proportionality* theories identify beauty with proportional – or harmonious, or symmetrical – arrangement of parts into wholes. Relatedly, *unitive* theories identify beauty with perfect unity or with principles of perfect unity; and *erotic* theories identify beauty with objects – or perhaps proper objects – of love and longing. *Hedonic* theories identify beauty with refined or disinterested pleasure, or with the objects, or proper objects, of refined or disinterested pleasure. Finally, and curiously, *utilitarian* theories identify beauty with suitedness to use or a refined kind of fitness to purpose.

As even this brief sketch makes clear, one of the key divisions among theorists of beauty is between those who suppose that beauty is grounded in properties of subjective experience, those who suppose that beauty is grounded in properties of external objects and those who suppose that beauty is grounded in relationships between subjective experiences, objects which occasion those experiences and the wider environment within which both the experiences and the objects are located.

11.4 Divine beauty

The claim that God is beautiful is puzzling on its face. True enough, there is some apparent scriptural support for the claim. Consider, for example, Psalms 27:4: 'One thing have I asked of the Lord that will I seek after; that I may dwell in the house of the Lord all the days of my life, to behold the beauty of the Lord, and inquire in his temple.' However, when we consider the various conceptions of beauty that have found favour in Western thought, most of them do not sit very well with the thought that God is beautiful.

The claim that God is – or is constituted by, or depends upon – a proportional, or harmonious, or symmetrical arrangement of parts into a whole, seems at odds with almost all theological traditions. Of course, this claim is obviously at odds with those who suppose that God is simple, and hence without parts. But even for those who do not accept the doctrine of divine simplicity there is a serious question about what kind of proportionality, or harmony, or symmetry could belong to God. Since God is supposed not to have a spatio-temporal location, the proportionality, or harmony, or symmetry in question cannot be spatio-temporal;

more generally, since God is supposed not to have anything even analogous to spatio-temporal location, it cannot be that the proportionality, or harmony, or symmetry in question is even analogous to spatio-temporal proportionality, or harmony, or symmetry. Moreover, even if it is accepted that God has some kind of logical or metaphysical composition, it is hard to see how that kind of composition could be proportional, or harmonious, or symmetrical.

The claim that God is a perfect unity might seem to comport better with at least some theological tradition, as might the claim that God is the principle of perfect unity. However, while proponents of the doctrine of divine simplicity will likely accept that God is a perfect unity – and while at least some proponents of the doctrine of divine simplicity will also accept that God is the principle of perfect unity – it is far from clear that the kind of perfect unity that is here being proposed has anything at all to do with 'beauty', in any ordinary sense of that word. If God is a single trope – variously identifiable as perfect power, perfect goodness, perfect knowledge and the like – then it seems that God is a singularly inappropriate object for properly *aesthetic* contemplation. True enough, the twentieth century witnessed the rise of various minimalist artistic traditions which offered similarly austere fare for aesthetic contemplation: blank canvases, Duchamp's fountain and so forth. However, whatever one might think about the aesthetic credentials of found objects, conceptual artworks and the like, one is unlikely to suppose that these kinds of things properly belong to the category of the beautiful.

The claim that God properly occasions a certain kind of refined or disinterested pleasure also seems at odds with most theological traditions. On most accounts, God is properly to be feared and to be held in a certain kind of awe: God is a proper object for worship and self-abasement. But it seems quite implausible to suppose that something that is the proper object of these kinds of attitudes is also a proper cause of that kind of refined or disinterested pleasure that some hold to be the hallmark of the beautiful. Moreover, in any case, it is hard to see how God could be the cause of the kind of refined or disinterested pleasure that is supposed to be caused in us by works of art: paintings, sculptures, musical compositions and the like. For, in these kinds of cases, there is a sensual component in the production of the refined or disinterested pleasure that is almost universally supposed to be entirely absent in the divine case. Perhaps it might be objected that works of literature provide a better analogy: for, in this case, the sensual component is typically either minimal or entirely absent. But, in the case of appreciation of works of literature, there is a sustained

imaginative engagement that is also without parallel in the divine case: no one supposes that one must make a sustained 'reading' of God in order to recognise the divine beauty.

The claim that God's beauty is a matter of suitedness to use or fitness to purpose seems, if anything, to fare even worse as an account of God's beauty. On most theological traditions, it would not be appropriate to say that God has a use or a purpose; hence, on most theological traditions, it would not be appropriate to say that God is suited to use or fit for purpose. Moreover, even if it were insisted that, because there are roles that God plays – for example being creator of our universe – there is a sense in which God can be assessed against those roles, it just seems wrong to say that what makes God *beautiful* is that God so adequately – or perfectly – fills the role of creator and sustainer of our universe. While it may make some kind of sense to claim that there is a connection between the suitedness to use or fitness for purpose of an artefact and the beauty of that artefact, theists will typically want to say that God was beautiful prior to creation, and that God would have remained beautiful even if God had never engaged in any creative activity.

We are left with the claim that God is a proper object of love and longing. No doubt many theists will suppose that it is true that God is a proper object of love and longing; and perhaps a good many will suppose that there is some connection between God's being a proper object of love and longing and God's being beautiful. Nonetheless, it is far from clear that God's beauty could be grounded in God's being a proper object of love and longing. In particular, there is a direction of fit problem: if God is a proper object of love and longing, then, presumably, that is because God is beautiful. But it cannot be *both* that God is a proper object of love and longing because God is beautiful and that God is beautiful because God is a proper object of love and longing. Moreover, even if it were true that some of God's properties could be grounded in God's being a proper object of love and longing, it is not clear that God's beauty could number among those properties. If there is a connection between beauty and love and longing, that connection presumably lies in the desire to have objects of beauty present to one: what one longs for is to have the beauty of that which one loves presented to one. But it is not clear that this is the right account of what is longed for by those who long for God. At the very least, there is room for thinking that those who long for God long to be in God's eternal presence primarily because being in God's eternal presence is so much better than the conceivable alternatives. However, if what really matters to one is one's presence to God rather than God's

presence to one, then we have not secured an appropriate ground for divine beauty.

Suppose that, the kinds of worries that we have just been canvassing notwithstanding, God is beautiful. If God is beautiful, then – for the same kinds of reasons that emerged in our earlier discussion of goodness – it seems plausible to suppose that beauty is a fundamental property of God. In particular, there is reason to deny that God's beauty could be grounded in God's perfection; and there is reason to deny that the claim that beauty is a fundamental property of God is in tension with the doctrine of divine simplicity; and there is reason to deny that God's beauty is grounded in God's being correctly or appropriately desired (by God). Moreover – for the same kinds of reasons that emerged in our earlier discussion of goodness – it also seems plausible to suppose that beauty will also be a fundamental property of some things other than God. In particular, there is reason to deny that the beauty of all other things is grounded in God's *judging* that those things are beautiful; and there is reason to deny that the beauty of all other things is grounded in their *measurement* against God's beauty.

11.4.1 Hill on divine beauty

Some readers will think that the preceding treatment of divine beauty went way too quickly. In particular, there are well-known defences of the claim that God is beautiful. Here, I shall consider the recent defence of this claim in Hill (2005).

Hill's account begins with Aquinas' view that beauty consists in (1) *completeness* (or integrity), (2) *harmony* (or right proportion) and (3) *clarity* (or radiance). Hill claims that each of (1)–(3) is sufficient for beauty; and he adds that, perhaps, having at least one of (1)–(3) is necessary for beauty (221–3).

Hill claims that the structure of the Trinity manifests completeness, harmony and clarity. He takes Swinburne's argument for the metaphysical necessity of there being exactly three divine persons to establish that the structure of the Trinity manifests *completeness*. He takes the 'perichoresis' of the divine persons to establish that the structure of the Trinity manifests *harmony*, to the extent that nothing could be more harmonious. And he takes the simplicity of the doctrine of the Trinity – there is exactly one divine substance and exactly three divine persons – to establish that the Trinity manifests *clarity* (224–5).

Hill also claims that the divine individuals manifest completeness, harmony and clarity. First, each divine individual has the *complete* collection

of great-making properties. Second, each of the properties possessed by one of the divine individuals *enables and supports* all of the other properties possessed by that divine individual. Third, there is a *simplicity* about the divine nature 'evident from the fact that there are no complications to it such as the essential possession of a complex thing such as a body' (225–6).

There are at least two ways in which Hill's defence of the claim that God is beautiful might be challenged. First, one might dispute the theory of beauty upon which he relies: one might deny that even the combination of completeness, harmony and clarity suffices for beauty. Second, even if one accepts that an appropriate combination of completeness, harmony and clarity suffices for beauty, one might deny that God exhibits an appropriate combination of these virtues.

I do not think that even the combination of completeness, harmony and clarity suffices for beauty. Imagine a white square canvas with a symmetrical black figure – a circle, or pentagon, or the like – centred in it. While we have completeness, harmony and clarity, there is plainly no guarantee that we have beauty: there is nothing here which suggests that, in those given to appropriate contemplation, our canvas is such as to occasion delight in virtue of its possession of completeness, harmony and clarity. Our canvas – for all of its completeness, harmony and clarity – may be dull, pedestrian, clichéd, derivative, trite and so forth.

Moreover, I do not think that the combination of completeness, harmony and clarity is necessary for beauty. When we consider paradigmatic cases of beauty – beautiful landscapes, beautiful faces, beautiful bodies, beautiful works of music, beautiful sculptures, beautiful paintings and so forth – 'completeness', 'harmony' and 'clarity' do not typically carry a significant load in our descriptions of the beauty of these kinds of things. While examples are bound to be controversial, let me offer just one: it seems to me that Britten's *Sinfonia da Requiem* is quite beautiful, but I would not describe it as 'complete', or 'harmonious', or 'clear'.

Suppose we set these considerations aside. Suppose, in particular, that there are thick conceptions of completeness, harmony and clarity on which these properties do suffice for beauty. Even so, we might deny that Hill shows that the Trinity is complete, harmonious and clear in ways that conduce to beauty; and we might deny that Hill has shown that the divine persons are complete, harmonious and clear in ways that conduce to beauty.

Hill's arguments for the beauty of the Trinity and the divine persons might be parodied by the following argument for my beauty, *qua* male

human being. First, I am *complete*: I have all of the bits that male human beings typically have – limbs, organs and the like. Second, I am *harmonious*: my various bits find their place in a greater whole, none acts to frustrate any of the other bits and all of my bits act appropriately to their allotted spheres of activity. Third, the claim that I am a male human being is *simple*: it can be expressed in a single, very short sentence. Whether or not you have independent knowledge about me, you should be very suspicious that any argument of this kind can suffice to establish that I am beautiful.

Even if completeness, harmony and clarity can suffice for beauty, it is only appropriate kinds of completeness, harmony and clarity that do suffice for beauty. While Hill may do enough to establish that there are good senses in which God is complete, harmonious and clear, I do not think that the kinds of arguments that he gives go anywhere near to establishing that God is complete, harmonious and clear in the kinds of ways that would suffice for beauty.

11.5 Truth

There have been thinkers who have discerned close connections between goodness, beauty and truth; and there have been thinkers who have thought of truth as a fundamental value, on a par with goodness and beauty. I shall briefly examine one instance of this kind of view.

Geach (1982) claims that God is the True. He intends the development of this claim to be a theory of truth, i.e. a competitor to speech-act theories of truth, correspondence theories of truth, coherence theories of truth, identity theories of truth, redundancy theories of truth, deflationary theories of truth and the like. The theory that Geach erects around this central claim has four principal tenets:

(1) All our true saying and thinking points to God.
(2) The life of God is God's thinking of – i.e. about – God.
(3) God has voluntary causality because this is proper to beings that have discourse of reason.
(4) By will alone, God brings about all true thinking and saying.

On its face, it seems implausible that truth is grounded in God. On the one hand, it cannot be that truth is grounded in God's *actions*: for it must be that there are things that are true of God prior to any action that God undertakes. On the other hand, it cannot be that truth is grounded in God's *nature* or *properties*: for it must be that there are truths about God's

nature or properties that are prior to any grounding work that God's nature or properties could do. But if truth cannot be grounded in God's actions, and truth cannot be grounded in God's nature or properties, then what other option is there? How could truth be grounded in God if truth cannot be grounded in God's actions and truth cannot be grounded in God's nature or properties?

Geach seeks to ground truth in God by claiming (1) that all true saying and thinking points towards God, and (2) that all untrue saying and thinking points away from God. Geach emphasises that 'points towards' is a metaphor: it is only in a metaphorical sense that all true saying and thinking points towards God. However, quite apart from the problems involved in grasping this metaphor, there are problems that arise even granted the acceptability of the metaphor. On the one hand, if it is true – as naturalists believe – that there is no God, then the acceptance of Geach's theory would have us asserting – absurdly – that truly saying or thinking that there is no God points to God. On the other hand, if we are to personalise truth, in order to give true saying and thinking something towards which it can point, surely we shall also need to personalise untruth, in order to give untrue saying and thinking something towards which it can point. While, as we have noted, Geach claims that all untrue saying and thinking points away from God, it should not be allowed that untrue saying and thinking points away from God unless it is also maintained that there is something other than God towards which untrue saying and thinking points. But then the resulting view is polytheistic – Manichean – rather than monotheistic.

The remaining tenets of Geach's theory are plainly controversial, even for theists. The claim that the life of God is God's thinking about God seems more Aristotelian than Abrahamic: typical theistic accounts that have God as creator require God to think about the creation, even though the created order is distinct from God. The claim that God brings about all true thinking and saying by will seems to be in serious tension with claims about creaturely freedom: if my thinking and saying are caused by God, then presumably all of my other actions are too. The claim that God has voluntary causality – i.e. that God can cause things to happen merely by willing that they should happen – is perhaps not so controversial on its own; but, as we saw in the preceding chapter, is certainly not unproblematic when coupled with the claim that God is incorporeal.

It is, I think, unsurprising that Geach's theory of truth has some fairly dramatic flaws. Currently popular theories of truth largely fall into one of two camps. On the one side, there are theories which deny that truth is

any kind of substantive property. For these kinds of views, truth is really just the shadow of a useful linguistic device: the truth predicate. But, on any view of this kind, there is no work for God to do. On the other side, there are theories which take truth to be a substantive property: correspondence, coherence or the like. For these kinds of view, at any point in the causal order, there are substantive truths about God which do not – and cannot – further depend upon God for their obtaining: that it is true that God is simple depends upon God's being simple; but the dependence of *its being true that God is simple upon God's being simple* does not itself have any further kind of dependence upon God.

11.6 Concluding remarks

Evaluative and normative properties have loomed large in recent philosophy. In particular, naturalists have wrestled with the incorporation of evaluative and normative properties into naturalistic world views. When one compares naturalistic world views with other world views, one is tempted to think that no such wrestling is required to establish the virtue of naturalism. For, if evaluative and normative properties are to find locations in world views, it seems more or less inevitable that they will be both ideological and ontological primitives: and naturalism seems no worse placed then other world views to incorporate evaluative and normative properties as ideological and ontological primitives. In particular, as we have noted in the present chapter, it seems that theistic world views are bound to treat goodness, and beauty, and truth as ideological and ontological primitives, unless those theistic world views choose to eschew these properties altogether (as, for example, by adopting a theory of truth on which truth is no kind of substantive property).

CHAPTER 12

Concluding remarks

We began with a taxonomy of candidate divine attributes. In summary, that taxonomy looked like this:

(1) *Modifier*: infinite, perfect, maximal, greatest, supreme
(2) *Unique intrinsic*: simple, eternal, necessary, self-existent, impassible
(3) *Shared intrinsic*: person, agent, mind, conscious, free
(4) *Generic relational*: creator, ground, source, sustainer, end, judge
(5) *Evaluative*: good, just, beautiful, rational, wise, worthy of worship
(6) *Reactive*: sympathetic, benevolent, jealous, angry, loving, providential, petitionable
(7) *Specific relational*: present (e.g. in religious experience), miracle worker

Of course, there are candidate divine attributes that are not readily located in one of the categories of this basic taxonomy. However, many of those further attributes are readily constructed from attributes that belong to more than one of these categories: omnipotence, omniscience, omnipresence, incorporeality, lack of spatial extension, lack of spatial location and so forth.

There are other possible taxonomies of candidate divine attributes. In particular, it may be productive to think about candidate divine attributes in the light of the fundamental 'cosmic roles' that believers take God to play. These roles include: (1) being a fundamental answer to generic existential questions; (2) guaranteeing a significant and enduring cosmic role for human beings; (3) providing an ideal standard or model for human beings; (4) ensuring that certain kinds of values are eventually triumphant; and (5) providing an appropriate focus for worship, ritual observance and the like.

God's being a fundamental answer to generic existential questions motivates the attribution of simplicity, eternality, necessity, self-existence, impassibility, incorporeality, lack of spatial extension, lack of spatial location,

being supreme creator, being infinite ground, being perfect source, being infinite sustainer, being ultimate end and so forth. God's guaranteeing a significant and enduring cosmic role to human beings motivates the attribution of presence, providence, sympathy, love, jealousy, anger and the like. God's providing an ideal standard or model for human beings motivates the attribution of personality, agency, perfect rationality, infinite wisdom, maximal freedom and so on. God's ensuring that certain kinds of values are eventually triumphant motivates the attribution of perfect goodness, infinite beauty, supreme wisdom, maximal worthiness of worship, being the ultimate end, being the supreme judge and the like. And God's providing an appropriate focus for worship and ritual observance further motivates the attribution of the entire package of attributes already described.

On any plausible taxonomy of divine attributes, it is clear that there are lots of questions to be asked about the understanding of these attributes. On the one hand, there are questions about the attributes considered individually: Is talk about this attribute intelligible? Is it so much as possible that there is something that possesses this attribute? Is it at all plausible to suppose that there is something that possesses this attributes? And so on. On the other hand, there are questions about the attributes considered collectively: Is talk about this collection of attributes intelligible? Is it so much as possible that there is something that possesses this collection of attributes? Is it at all plausible to suppose that there is something that possesses this collection of attributes? And so on.

These questions are not easy to answer. Theists disagree between themselves about – among other things – (1) *what* it is to attribute properties to God; (2) *which* attributes are properly ascribed to God; and (3) *how* those attributes that are properly ascribed to God are to be understood or interpreted.

One important consequence of the fact that these questions are not easy to answer is that those who aspire to provide arguments against the existence of God are unlikely to gain much ground by trying to argue from mere analyses of the divine attributes taken singly or collectively. Even if you can show that, on a given understanding or interpretation of divine attributes, taken singly or collectively, it is impossible that there is something that possesses those divine attributes, theists will always be able to reply that you have misunderstood what it is to attribute properties to God and/or that you have included in your account properties that are not properly attributed to God and/or that you have misunderstood or misinterpreted the properties that are included in your account. Unless you can show that, on any account of what it is to attribute properties

to God, for any choice of properties that are attributed to God, on any account of those properties, it is impossible that there is something that possesses those properties, your 'inconsistency' argument against the existence of God will be incomplete (and, almost certainly, there will be theists out there whose views are not defeated by your argument).

Some may suppose that the points just made are good news for theism. However, it seems to me that there are very similar points to be made in connection with competing world views. If we think of world views as offering accounts of the fundamental attributes of causal reality, then theism is not the only world view of which it is true that there is internal disagreement concerning (1) what it is to attribute fundamental properties to causal reality, (2) which fundamental attributes are properly ascribed to causal reality, and (3) how those fundamental attributes that are properly ascribed to causal reality are to be understood or interpreted. On the contrary, it is the norm for there to be disagreement about these matters amongst proponents of world views. So, for example, unless you can show that, on any account of what it is to attribute fundamental natural properties to natural reality, for any choice of fundamental natural properties that are attributed to natural reality, on any account of those fundamental natural properties, it is impossible that there is something whose fundamental properties are exhausted by those fundamental natural properties, then you will not be able to prosecute an 'inconsistency' argument against naturalism (and, almost certainly, it will turn out that there are naturalists whose views are not defeated by your argument).

Even if it is true that we should not expect an examination of the divine attributes to yield compelling arguments against theism, we might hope that an examination of the divine attributes will at least focus attention on areas where currently widely accepted versions of theism face difficulties. In the rest of this chapter, I shall try to draw together the considerations raised in the preceding chapters, to indicate some of the places where pressure is currently to be felt.

12.1 Attribution

If talk about God is meaningful, then we can use predicates – or, perhaps, predicables – to make literally meaningful claims about God: if talk about God is meaningful, then we can make literally meaningful claims of the form 'God is F'. On my preferred account, the reference of the term 'God' is fixed by the description 'the god', or 'the one and only god', or the like. Given this account, if God exists, it is literally true that God is a god. In

other words, if God exists, then the predicate 'is a god' is literally truly predicated of God.

If we adopt a luxuriant – or pleonastic – account of properties, then whenever a predicate is literally predicated of something, that thing possesses the property that is expressed by that predicate. If S(God) is a sentence that contains one or more occurrences of the word 'God', and if S(God) is meant to be understood literally, then *λxS(x)* is a predicate that is properly literally predicated of God, and, in the sentence *[λxS(x)]God*, *λxS(x)* expresses a property that is possessed by God.

If we wish to deny that there can be properties in common between God and creatures, then we have several options: (1) we can deny that we ever make literally true claims about God; or (2) we can adopt a sparse account of properties, according to which many predicates do not express properties when predicated of objects, and we can insist that there is no overlap between the property-expressing predicates that may be truly literally predicated of creatures and the property-expressing predicates that may be truly literally predicated of God; or (3) we can adopt a sparse account of properties according to which many predicates do not express properties when predicated of objects, and we can insist that, while there is overlap between the property-expressing predicates that may be truly literally predicated of creatures and the property-expressing predicates that may be truly literally predicated of God, those predicates that may be truly literally predicated of both God and creatures are not truly predicated of God in virtue of God's possession of properties that God has in common with creatures.

If we do not distinguish between intrinsic and extrinsic properties, then we shall be hard-pressed to defend even the intelligibility of any of the positions just mentioned. On any account, there are relations that hold between God and creatures, and these relations can be equivalently described as relational properties of either. Suppose, for example, that God is creator of the universe. Then God has the property of *being creator of the universe*; and the universe has the property of *having been created by God*. Moreover, the relation expressed by the word 'creates' is one that connects God to the universe: God and the universe are terms of this relation (in that order).

Suppose we restrict our attention to denial of the claim that there can be intrinsic properties in common between God and creatures.

We could try denying that we ever make literally true claims about God's intrinsic properties. But if we adopt a luxuriant – or pleonastic – account of properties, we can hardly deny that God is self-identical, or that God is a god.

We could try adopting a sparse account of properties and insisting that there is no overlap between the intrinsic property-expressing predicates that may be truly literally predicated of creatures and the intrinsic property-expressing predicates that may be truly literally predicated of God. Perhaps, for example, we might try saying that only God is *perfectly good*. But, of course, perfect goodness entails goodness: so, if we allow that goodness is a property, then we will end up committed to the claim that God and creatures have intrinsic properties in common.

We could turn to the doctrine of divine simplicity, and try saying that God has no properties: sentences that appear to attribute intrinsic properties to God are simply made true by God, rather than by God's possession of relevant properties. While there is clearly room to doubt that this view is intelligible – in particular because you might wonder how the magic that allows us to speak univocally of God and creatures is worked – those who adopt it will be able to speak mostly in ways that sound just like those who think, instead, that there are properties in common between God and creatures. They will agree, for example, that it is literally true that God is good; and they may even agree that this means, loosely speaking, that God has the property of being good. However, they will insist that, strictly speaking, God does not have the property of being good, even though God is good.

Given that there appears to be just this one way of holding that there are no intrinsic properties in common between God and creatures, there will be nothing lost if we henceforth speak as if we have accepted that there can be – and indeed are – intrinsic properties that are common to God and creatures, if God exists.

12.2 Modifiers

The use of superlative modifiers in connection with God – *infinite*, *perfect*, *supreme*, *maximal*, *omni-*, *all-*, *greatest* and so forth – may perhaps be explained or understood in terms of the various roles that God is taken to play: in particular, we might note God's being an *ultimate* answer, God's being an *ideal* standard or model, God's *ensuring* that virtue triumphs in the end and God's being an *appropriate focus* for worship and ritual observance. It is not, I think, mysterious that ultimacy, ideality, guaranteed victory and worshipworthiness might all be taken to require superlativeness – infinity, perfection, supremacy, maximality and the like – even if it also can reasonably be denied that ultimacy, ideality, guaranteed victory and worshipworthiness *require* superlativeness.

Perhaps the least tendentious superlative modifier that is used in connection with God – though it is perhaps more commonly used by philosophers than by 'regular' theists – is *maximal possibility*. If there is a maximum possible degree to which an attribute can be possessed, and if God exists, then – so long as the attribute in question is of a kind that it is appropriate for God to possess – it seems plausible that theists should accept that God possesses that attribute to that maximum possible degree. For example, if God is to be an ideal standard or model in a given respect, then it should not be possible for anything to surpass God in that respect. Of course, if God is thought to possess a range of attributes to the maximum possible degree, there will be further questions about whether there is a maximum possible degree to which each of these attributes can be possessed, and whether it is possible for there to be a single being that possesses each of these attributes to the maximum possible degree. Even maximum possibility is not untendentious if it is taken to actually apply both to God and individually to a range of God's attributes. Moreover, as we noted in Chapter 3, there is no *a priori* guarantee that the greatest possible being – or the possible being that exemplifies each of these attributes to the maximum possible extent – is God *apart from* some further specification of the range of possibilities. On some theories of the range of possibilities, maximum possibility falls far short of ideal, or perfect, or omni-, or all-.

The more tendentious modifiers – perfect, omni-, all-, infinite – raise a host of further questions, some of which were noted in Chapters 2, 3 and 8. While these expressions might be treated as something like synonyms for 'maximum possible' in contexts in which they are applied to God, I do not believe that this is how these expressions are typically used when applied to God (for example by 'perfect being' theists). I do think, however, that theists would likely do well to revise their practice at this point.

12.3 Fundamental answers

The properties whose attribution to God is motivated by the answers that are generated for generic existential questions – Why is there anything causal? Why does the universe exist? What is the ultimate purpose of human life? – are, on the whole, the divine attributes whose intelligibility is most contested. For almost any of these attributes – simplicity, eternality, necessity, self-existence, incorporeality etc. – we can find philosophers who claim that there is no coherent content to be given to the talk of those who invoke them. Moreover, for some of them – including simplicity, self-existence and necessity – we can even find *theists* who claim that there is no coherent content to be given to the talk of those who invoke them.

For what it is worth, my own view is that we can appeal to necessity to answer those genuine existential questions that have answers, but we do not need to attribute the necessity in question to God. There is causal stuff because there had to be; the universe – 'natural reality' – exists because it had to be the case that 'natural reality' exists. Nothing is added to these explanations by appeals to self-existence, or simplicity, or the like; and theism also gains nothing by invoking those attributes. Of course, theism requires some of these attributes – eternality, incorporeality – where competing world views – such as naturalism – do not; but, all else being equal, this is a net loss for theism. Theists will insist that this ideological expense is repaid elsewhere – but pursuing that dispute takes us away from mere consideration of the attributes and towards substantive evaluation of the comparative theoretical virtues of theism and naturalism.

Setting simplicity and self-existence to one side, I do not claim that there is no coherent content to be given to the attributes currently under consideration. As the discussion in Chapters 5, 7 and 10 makes clear, there are difficult questions that arise in connection with eternality, incorporeality and the like. Moreover – though I have not played up these issues in the present work – there are also difficult questions that arise in connection with causality and necessity. However, it is one thing to show that there are difficult questions to be confronted; it is quite another to show that those difficult questions admit of no coherent answers.

12.4 In God's image

Most of the remaining attributes are properties that are common between God and (some) creatures: personhood, agency, mindedness, consciousness, freedom, goodness, justice, beauty, rationality, wisdom, sympathy, benevolence, jealousy, anger, love, providence and so forth. As we have noted in various places above, theists disagree amongst themselves about the propriety of allowing that these kinds of properties are common between God and man.

Some theists deny that God is a person and/or an agent and/or minded and/or conscious; such theists often say that it is improperly anthropomorphic to suppose that God is a person and/or an agent and/or minded and/or conscious. However, it is widely recognised that 'regular' religious belief requires that God is a person, an agent, possessed of a mind, conscious and so forth.

Some theists deny that God is good and/or just and/or beautiful and/or rational and/or wise and/or sympathetic and/or benevolent and/or jealous and/or angry and/or loving and so forth in the same sense in

which human beings may be good, just, beautiful, rational, wise, sympathetic, benevolent, jealous, angry, loving etc. Sometimes the denial is accompanied by the insistence that there is a distinction between God's goodness – perfect goodness – and human goodness; and between God's justice – perfect justice – and human justice; and between God's beauty – perfect beauty – and human beauty; and between God's rationality – perfect rationality – and human rationality; and between God's wisdom – perfect wisdom – and human wisdom; and between God's sympathy – perfect sympathy – and human sympathy; and between God's benevolence – perfect benevolence – and human benevolence; and between God's jealousy – perfect jealousy – and human jealousy; and between God's anger – perfect anger – and human anger; and between God's love – perfect love – and human love; and so forth. However, we can only understand the need for the insistence that there is a distinction between, say, God's goodness and human goodness if we suppose that God's goodness and human goodness are both species of goodness. To advert to a point that was made earlier: anything that is perfectly good is, *ipso facto*, good. So, while it is surely to be acknowledged that there would be a vast difference between, say, God's goodness and human goodness, our recognition that there is this vast difference depends upon a prior understanding of what it is in virtue of which we have two instances of goodness (and similarly for all of the other cases listed above).

If we suppose that God does share these attributes – personhood, agency, mindedness, consciousness, freedom, goodness, justice, beauty, rationality, wisdom, sympathy, benevolence, jealousy, anger, love, providence and so forth – with (some) creatures, then we might suppose that God's possession of these attributes helps to explain their possession by creatures. On the one hand, we might suppose that God's having these attributes gives God a reason to make creatures who also have these attributes; on the other hand, we might suppose that God's having these attributes somehow explains how it is *possible* for creatures to have these attributes.

With all of these attributes, insofar as there is a genuine question about how it is possible for these attributes to be instantiated in human beings, it seems to me that theism gains no explanatory advantage over naturalism. Theism has it that these are primitive properties of God; and theism has nothing more to say about how it is possible for these attributes to be instantiated in human beings – beyond what it is also open to naturalists to say – beyond the observation that God makes provision for it. But it is open to naturalism to hold that these are primitive properties of natural entities; and it is open to naturalists to insist that – insofar as there is no

naturalistic reduction on offer – it is a matter of primitive necessity that it is possible for these attributes to be instantiated in human beings. Again, pursuing this dispute further would take us away from mere consideration of the attributes and towards substantive evaluation of the comparative theoretical virtues of theism and naturalism.

12.5 Final victory

Some divine attributes that we have not yet considered come most clearly into view, in the context of our significant and enduring cosmic role, with the claim that certain kinds of values are guaranteed to win out in the end. In particular, the claim that God is ultimate judge and final end was treated at most tangentially in our earlier consideration of fundamental answers.

While there are some non-theistic religions which insist that, in the context of our significant and enduring cosmic role, certain kinds of values are guaranteed to win out in the end – I am thinking here in particular of certain strains of Buddhism – most non-theists reject both the claim that we have a significant and enduring cosmic role and the further claim that certain kinds of values are guaranteed to win out in the end.

In the end, it seems to me that this role for God – and the bundle of attributes associated with it – has particular significance for most theists. Our universe is a manifestly unfair place in which it all too frequently happens that the more virtuous suffer and the more vicious prosper. In the light of this observation, there may be quite deep satisfaction to be found in the thought that, in the end, everyone will get exactly what he or she deserves – though, of course, the depth of the satisfaction will likely depend upon the further thought that one is securely ensconced in the 'virtuous suffering' side of the ledger.

While there are difficulties for the view that certain kinds of values are guaranteed to win out in the end – not least in the apparent absence of any evidence that would support this contention – it should be allowed that those difficulties that we considered in Chapters 7 and 11 do not suffice to show that this view is incoherent.

12.6 Last word

This discussion of the divine attributes does not end with a bang. As I said as the beginning, this is an interim summary of my thought upon these topics. As with most questions in philosophy, there is flux at all levels. There is more work to be done at the level of taxonomies of divine

attributes, both in the framing and application of those taxonomies. Moreover, there is more work to be done in connection with each of the divine attributes discussed in this book, and in connection with those divine attributes that have not received serious discussion in this book. However, if we are seriously interested in providing a fair and balanced assessment of the comparative merits of theism and naturalism, we need to go on investigating both world views at increasing levels of detail. My next project is to provide some more detailed discussion of naturalism.

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